

Network Access Rate Policy for Rural Broadband Service Providers

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This paper is one of a series of papers outlining the unique operating characteristics of the telecommunications industry in small rural communities and the impact of access regulation on these operations. Rural broadband service providers follow business plans characterized by the design, engineering, construction and operation of privately owned convergent broadband networks that overlay or are “overbuilt” on top of preexisting networks owned and operated by incumbent competitors in the markets. As such, they provide true facilities based competition in these markets. They are referred to herein as “Broadband Service Providers,” or “BSPs.”

BSP network access rate regulation, like regulation in the telecommunications industry in general, is undergoing rapid change. Unfortunately, the relatively small size and limited number of rural community BSPs and their lack of participation in the regulatory process to date is causing many of the unique BSP issues to be overlooked, often times to the extent that federal and state regulatory decisions produce results in small community markets that are directly contrary to stated regulatory goals. Regulatory decisions over the past 10 years have essentially pushed the square peg of metropolitan CLEC reseller regulation into the round hole of the rural BSP facilities-based business model. The resulting fit has not been pretty. It is the author’s hope that these papers will provide the industry with the information necessary to reevaluate and adjust regulatory approaches in rural markets. Except as otherwise specifically noted, the analysis and conclusions in these papers are those of the author and do not necessarily represent the views of the author’s company.

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Network Access Rates for Rural Broadband Service Providers

Abstract

The rise of competitive rural broadband service providers (“BSPs”) began with the enactment of the Telecommunications Act of 1996. As early as 1997, BSPs began operating in small rural community markets by building their own proprietary networks complete with direct customer premise connections to compete with the much larger incumbents who had allowed their service plant to deteriorate. Because they own and operate their own proprietary networks, BSPs share much more in common with their small community, rate-of-return Incumbent Local Exchange Carrier (“ILEC”) cousins than they do with their large incumbent rivals (due to size and geographic coverage) or with the development of the metropolitan area, reseller-based Competitive Local Exchange Carriers, or “CLECs.” This caused numerous problems for BSPs when the CLEC access regulation based on RBOC nationwide average rates and allegedly unfair interconnection treatment of cellular providers was arbitrarily forced down over the BSP rural business model in 2001, with severe adverse results.

The Federal Communications Commission (the “Commission”) has long recognized that a major key to establishing competition in telecommunications is mandatory interconnection of competing networks. Mandatory interconnection removes substantial barriers to entry into telecommunications markets. However, mandatory interconnection also introduces the problem of just compensation to individual network owners like BSPs, a Constitutional imperative under the Fifth Amendment’s Takings Clause.

The Commission initially addressed the compensation issue by finding that the use of company specific costs provides the best method for establishing fair interconnection rates. Unfortunately, the Commission abandoned this position first by providing preferential treatment for cellular carriers in 1996 and then in 2001 by imposing network rate caps based on incumbent access rates on the assumption that these rates were representative of market prices. This is simply not the case. As a result, rural BSPs are forced to cap their access rates at levels far below their actual costs. These major policy errors are forcing BSPs to cross subsidize incumbent rivals, large cellular companies and other competitors, interfering with company cost structures and efficient consumer pricing (leading to higher consumer prices), distorting the economic market signals for capital investment, and slowing down market entry, broadband innovation and competition in rural markets.

The Commission attempted to partially ameliorate these results with the “Rural Exemption.” However, this exemption is so narrowly drawn that it is not providing the relief necessary in the small community BSP environment. It is based on population limits, not line density factors (the true cause of network cost differences), and does not properly mirror National Exchange Carriers Association (“NECA”) interstate access compensation because it ignores the NECA pool contribution to rural ILECs. It also does nothing to address the severe market distortions caused by current cellular access rate preferences.

The failures of the Commission’s BSP access rate decisions have effectively brought new market entry to a halt in America’s small communities, stalling broadband deployment in these areas and entrenching the “digital divide,” all directly contrary to the Commission’s expressed goals. The solution to this problem lies not in an arbitrary exemption or benchmark access rates or negotiated interconnection agreements, but in a return to the use of company specific forward looking cost studies to establish network access rates for rural BSPs.

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Introduction

1. PrairieWave Telecommunications, Inc. (“PrairieWave”) pioneered the rural BSP overbuild planning and implementation process in 1996. By 1998, it operated the largest competitive Hybrid Fiber Coax (“HFC”) broadband network in the country, providing a converged bundle of telephone, cable and Internet services on one bill with one call customer service. By 2000, it had committed to overbuild 19 additional communities, and has completed all but a small portion of one community. It recently acquired the operations of Black Hills FiberCom, a substantially identical operation covering 10 communities in the Northern Black Hills region of western South Dakota. Today it is one of the largest rural community BSPs in the country, operating an integrated broadband network interconnecting 44 small communities in South Dakota, Iowa and Minnesota.
2. Unfortunately, the company’s ability to deploy broadband technologies into new rural markets has been curtailed by the Commission’s CLEC network access rate policies, first adopted in 2001,¹ which ignore company specific network costs and set access rate caps that are far below PrairieWave’s actual costs of network operations. This has been compounded by the Commission’s cellular access rate orders, which highly favor the major cellular service providers.² As a result, PrairieWave is subsidizing network access for the very incumbents and wireless companies it set out to compete with and finds itself in the middle of a highly unfair situation of access rate arbitrage and gaming of the system in favor of its competitors. This has made further expansion into new rural markets uneconomic given today’s capital markets.³
3. In November 2004, PrairieWave attempted to partially redress this situation by filing a company specific interstate access tariff and supporting forward-looking economic cost study with the Commission,⁴ presenting the Commission with factual data supporting BSP access rates for the first time⁵ and demonstrating that the application of incumbent access rate caps to

Citations in the following footnotes are abbreviated and can be found in full in the “Sources Cited” section at the end of this paper.

¹ CLEC Access Order I and CLEC Access Order II. The resulting rate/cost disparity has caused PrairieWave to cease further expansion into new rural markets. *See* Note 107 and the accompanying Text *infra*.

² *See* Text beginning at ¶ 86 and accompanying Notes.

³ *See* Note 107, *infra*. As discussed in detail below, under current regulation, BSP access rates are forced substantially below cost, causing a fundamental pricing distortion that directly results in inefficient capital investment signals. Specifically, PrairieWave is unable to enter new small rural communities due to the unfair pricing distortions caused by below cost access revenues that directly subsidize its competitors and result in an inability of PrairieWave to shift revenue recovery without losing market share, all of which combine to reduce the rate of return on new investment below the costs of entering small community markets.

⁴ *See* the PrairieWave Petition.

⁵ The Commission’s consideration of CLEC access rates up to this point has been marked by a frustrating lack of hard cost data, especially in the BSP area. *See for example* the BTI Order. *See also* the accompanying Text and analysis in Notes 94 and 220 *infra*. At the time of CLEC Access Order I, PrairieWave, then known as Dakota Telecommunications Group (“DTG”), was controlled by a large UNE-P based CLEC reseller that had no

BSPs operating in small communities and rural markets contravenes the competitive goals set by Congress in the Telecommunications Act of 1996⁶ and by the Commission in promulgating rules pursuant to the Act. Unfortunately, 6 months later, the Commission has yet to provide the relief requested. Meanwhile, PrairieWave's economic losses mount and new market entry is delayed.⁷

4. This paper reviews the current BSP regulatory schema and urges a return to true company specific access rates as the only solution that adequately addresses the problems. Part I examines the goals of access regulation with special emphasis on the mandatory interconnection issue that creates the network access compensation problem. Part II is a critical look at the current incumbent based benchmark rate structure and analyzes the serious economic problems created by this structure. Part III examines the alternative of private negotiated interconnection and access rate agreements, concluding that such agreements cannot solve the BSP access revenue problem due to unequal bargaining power. Emphasis here is placed on the enormous distortions caused by current Commercial Mobile Radio Service ("CMRS"), or cellular, access arrangements. Part IV describes the proper role of forward looking economic cost regulation in setting BSP access rates. While all four Parts use PrairieWave's situation as an exemplar for analysis⁸, the general economic theories discussed in this paper as well as the problems created for competition in rural communities are applicable to all rural BSPs in the country.

Part I: The Foundation of Telecommunications Competition

The Goals of Telecommunications Regulatory Policy

5. The stated goal of the 96 Act is to promote competition in the telecommunications industry.⁹ This reflects the recognition by Congress and the Commission that both consumer pricing and service innovation is best improved over the long term through the operations of

appreciation of the need for cost study analysis and prevented DTG's management from filing such information in the Commission's proceedings.

⁶ *Telecommunications Act of 1996*, Pub. L. No. 104-104, 110 Stat. 56 (1996). This Act amended the Communications Act of 1934 found at 47 U.S.C. §§ 151 *et seq.*

⁷ PrairieWave continues to extend its broadband networks pursuant to mandatory regulatory requirements under its existing cable franchise agreements. It has also expanded by acquisitions. But it is unable to justify the construction of advanced broadband networks in new rural markets. *See* Note 107, *infra*.

⁸ The information disclosed in this paper relates only to PrairieWave's operations. It does not include similar information from its recent acquisition of Black Hills FiberCom since FiberCom (like most other small BSPs) has not been tracking the information in enough detail to make comparative or additive analysis meaningful. This, of course, is now changing.

⁹ "Our actions are consistent with prior Commission actions to foster competition and efficient pricing in the market for interstate access services, and to create universal service mechanisms that will be secure in an increasingly competitive environment." ILEC Access Order at ¶ 3.

the market economy,¹⁰ a conclusion supported by virtually all of the economists and policy analysts writing in this area.¹¹

6. To meet this objective, the Commission established the following goals to guide its rule making process:

- To encourage market entry by competitive service providers.¹²
- To reduce the risks of market entry to new entrants.¹³
- To encourage efficient levels of investment by eliminating regulatory arbitrage opportunities.¹⁴
- To encourage innovation and the introduction of new technologies.¹⁵
- To adopt and apply regulation in a technology and company neutral manner.¹⁶

¹⁰ “[Our actions] are designed to bring the American public benefits of competition and choice by rationalizing the access rate structure and driving per-minute rates towards lower, more cost-based levels, while furthering universal service goals.” *Id.* at ¶ 1. “...[A] market-based approach which relies primarily on competition to drive access charges down to cost-based levels generally would serve the public interest better than prescribing rates.” *Id.* at ¶ 24.

¹¹ “In view of the immense importance of technological progress for economic welfare it becomes especially important to see to it that cost-of-service determinations are compatible with the optimum adoption of new technology.” Kahn, Volume I at p. 117. “Above all, if this experience [technological innovation in telecommunications] demonstrates anything, it demonstrates the virtue of freedom of entry and competition as a device for innovation—for encouraging the development of new and different services and for assuring the optimal development and exploitation of new technology. *Id.*, Volume II at p. 149. *See also* Posner at pp. 4, 19; Breyer at p.299; Mitchell & Vogelsang at p. 5; and Wilson at pp. 43-44. Wilson presents the FCC’s decisions in the satellite communications dockets as another example: “The presence of competitive sources of supply of specialized services, both among satellite system licensees and between satellite and terrestrial systems, should encourage service and technical innovation and provide the impetus for efforts to minimize costs and charges to the public.” *Id.* at pp. 133-134, quoting DOMSATII.

¹² Local Competition Order at ¶ 378. *See also* CLEC Access Order I, ¶¶ 6, 33. The inherent efficiencies of competition as a regulatory goal in and of itself has a long history in public utility regulation. *See* Kahn at p. 164-165, citing *Northern Natural Gas Company et. al. v. Federal Power Commission*, 399 F. 2d 953, 959-961 (1968). “Underscoring the practice of public utility regulation was the premise that the goal of regulation was essentially to mimic competitive conditions. In other words, one could say that the goal of regulation should be to produce competitive results...” Wilson at p. 61.

¹³ Local Competition Order, ¶ 378.

¹⁴ “While we seek to promote competition among local-service providers, we also seek to eliminate from our rules opportunities for arbitrage and incentives for inefficient market entry.” CLEC Access Order I, ¶ 33. *See also* CLEC Access Order I, ¶¶ 3 and 122; Local Competition Order, ¶ 672.

¹⁵ *See* Note 11, *supra*.

¹⁶ “We believe, as a general policy, that all telecommunications carriers that compete with each other should be treated alike regardless of the technology used...” Local Competition Order at ¶ 993. “[T]he pricing for

7. PrairieWave agrees with these goals and with the overall objective of using market forces to encourage innovation, set prices, and therefore properly signal the allocation of investment capital in the industry. PrairieWave believes that these goals are widely accepted throughout the industry, and that its own investment and entry in numerous small community markets from 1997 through early 2001 provides excellent real world proof that market forces can encourage competition and bring the benefits of competition to rural consumers.¹⁷ However, the unique prerequisites of telecommunications competition—that of mandatory interconnection between competing carriers and the resulting access compensation issues—have been applied in a way that is fundamentally unfair to BSPs in general and PrairieWave in particular. These rules completely undercut the Commission’s competitive goals and advanced technology deployment objectives in small and rural communities.

Mandatory Interconnection and the Ubiquitous Network Requirement

8. In its Local Competition Order, the Commission ordered that “...the incumbent LEC must provide interconnection in accordance with Section 251(c)(2) and the Commission’s rules thereunder to any telecommunications carrier, including interexchange carriers and commercial mobile radio service (CMRS [what we now know as cellular companies]) providers.”¹⁸ This Order extends to all telecommunications service providers, including BSPs operating in rural areas.¹⁹ The Commission further ordered that interconnection and network access “...must be equal in quality to that provided by the incumbent LEC to itself or its affiliates, and must be provided on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.”²⁰

9. Mandatory interconnection of all competitive service providers is necessary to introduce and maintain a competitive telecommunications industry. This is so for three reasons. First, it is socially desirable to connect as many users as possible to a network that allows each user to communicate with all others. This is, in fact, the underlying drive behind the industry’s long-standing commitment to universal service.²¹ Second, as a purely economic matter, any one company’s network value is exponentially increased if it is interconnected with all other networks both with respect to the individual service provider involved and to the users of the

interconnection, unbundled elements, and transport and termination of traffic should not vary based on the identity or classification of the interconnector.” *Id.* at ¶ 862. *See also* ¶ 861. “In order to achieve pro-competitive, deregulatory markets for all telecommunications services, we must create a new system of funding universal service that is specific, explicit, predictable, sufficient, *and competitively neutral*.” *Id.* at ¶ 716 [emphasis added].

¹⁷ Black Hills FiberCom also began its broadband deployments in ten markets in the northern Black Hills region of South Dakota in 1998. It also has no plans to enter new markets, again due to unfavorable economics caused by inadequate network compensation.

¹⁸ Local Competition Order, ¶¶ 26, 181, 213, 217.

¹⁹ *Id.* at ¶¶ 26, 1045, 1412.

²⁰ *Id.* at ¶¶ 26, 224, 315, 316.

²¹ *See* Mitchell & Vogelsang at p. 224.

networks. Finally, and largely as a result of the foregoing reasons, the lack of interconnection operates as a substantial barrier to entry for new competitors.

10. Gerald Brock, an expert economist in this area, writes as follows:

“The first economic characteristic that distinguishes telecommunication from most industries is that the value of telephone service depends on the number of people that can be reached through that particular service. A single telephone or a single fax machine unconnected with other telephones or fax machines has no value. This characteristic is known as the network externality and has been extensively studied in the economics literature. Because the value of access to a network increases with the number of people that can be reached on that network, interconnection of two separate networks increases the value of both. Interconnection rights can therefore be used as crucial part of competitive strategy. There is also a social interest in interconnection issues because interconnection disputes can reduce total efficiency and exclude new competitors.”²²

11. Congress recognized the importance of ubiquitous communications networks in the preamble to the Communications Act of 1934 where it established the Commission “...[F]or the purpose of regulating interstate and foreign commerce in communication by wire and radio *so as to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide and world-wide wire and radio communication service* with adequate facilities at reasonable charges... .”²³ [Emphasis added.]

²² Brock at p. 62. Kevin G. Wilson agrees: “In a communications network, such as the telephone network, the value of the network to all subscribers increases as the number of subscribers increases. A network that enables a caller to reach millions of potential subscribers is infinitely more useful and, therefore, valuable than one that reaches only ten subscribers.” Wilson at p. 58. William Sharkey explains it this way: “A potential subscriber receives a benefit from joining the network that depends on both the number of other users, most of whom are unknown initially, and the identity of specific users who are already in the system. That is, a communications service is valuable in that it allows communication with a large number of people and because it allows more frequent contact with a smaller number of close friends. ...A telephone network benefits all those who subscribe by lowering the costs of communication among its members.” Sharkey at p. 187. *See also* Friedlander at pp. 49-50, 80; Mitchell & Vogelsang at p. 11; McNamara at p. 105; and Kahn, Volume II at p. 236, fn. 184.

²³ Quoted in Wilson at p. 62. The growing importance of networks to our overall economic development is a well-documented phenomenon. “In the twentieth-century economy, technological and organizational innovations play the crucial role that abundant resources did in the nineteenth. Growth is less dependent on increased inputs (of labor, for instance) than it is on our ability to make more efficient use of a given set of resources, capital, and labor. We now achieve growth primarily through gains in productivity that stem from organizational and technological advances. The well-being of our business system turns, increasingly, on the ability of our firms to translate new scientific and engineering concepts into marketable products or services and practical techniques of production and distribution.” Wasserman at p. xiii. Telecommunications technologies have, of course, been one of the key enablers of this process.

12. The Commission has long acknowledged the need for local interconnection in establishing competitive telecommunications services.²⁴ It specifically recognized this value in the CLEC Access Order I:

“In the Local Competition Order, the Commission found that a section 251(a)(1) duty to interconnect, directly or indirectly, is central to the Communications Act and achieves important policy objectives. ...We agree that universal connectivity is an important policy goal that our rules should continue to promote. The public has come to value and expect the ubiquity of the nation’s telecommunications network. Accordingly, any solution to the current problem that allows IXCs unilaterally and without restriction to refuse to terminate calls or indiscriminately to pick and choose which traffic they will deliver would result in substantial confusion for consumers, would fundamentally disrupt the workings of the public switched telephone network, and would harm universal service.”²⁵

13. The value created by network economies in telecommunications is so powerful that it has frequently been used as a barrier to entry and the anticompetitive weapon of choice for the incumbent Bell companies.²⁶ In fact, it was the threat of prohibiting interconnection between competitive and even noncompetitive telephone companies that triggered the initial regulation of the industry in the late 1880s.²⁷ It continued as a key issue in the MCI decisions in 1974, the Southern Pacific Communications decision in 1978, and in the Mid-Texas Communications

²⁴ An example: “In the *Specialized Common Carrier* decision the FCC anticipated the need for local connections. It expected the established carriers to provide these circuits upon request and on reasonable terms.” Wilson at p. 127. And, again, in the satellite communications area: “The competitive satellite operators were dependent on AT&T for local distribution, and as a result, subject to the same kinds of delays and interconnection problems that had plagued the microwave specialized common carriers.” *Id.* at p. 135. The courts have similarly recognized this requirement: “...our emphasis on tariffs and rate making as the exclusive means for future limitations on the specialized carriers’ development clearly contemplated that the carriers would be free to expand their service offerings—and would be afforded the necessary interconnections—until and unless it was found that the public interest demanded otherwise.” *MCI v. FCC*, 580 F.2d 590 D.C. Cir. 1978 as quoted in Wilson at p. 129. [Emphasis added.]

²⁵ CLEC Access Order I, ¶¶ 92 and 93. *See also* CLEC Access Order I, ¶ 24. This finding was reiterated in CLEC Access Order II at ¶ 61.

²⁶ Friedlander at pp. 2, 61, 68-71, 74-75. *See also* the discussion in Text ¶ 9 and the accompanying footnotes *supra* and, especially, the Commission’s own conclusions supporting this position in the ILEC Access Order proceedings discussed beginning at ¶ 68 *infra*. Peter Huber also provides an excellent summary of the use of interconnection barriers as an unfair business practice, which led to antitrust actions and in the end to the promulgation of the interconnection rules in the Act. Huber, beginning at p.25. *See also* Brock, at pp. 62, 65, 74, 245-246.

²⁷ Wilson at pp. 16-18, 20, 53, 71. “Until 1913, for example, AT&T refused to interconnect in any way with the numerous independent local telephone companies that had sprung into existence on expiration of the Bell patent; in that year, however, following on the threat of an antitrust suit, it agreed thenceforth to connect its system for toll service purposes with the lines of independent companies whose equipment satisfied its quality specifications.” Kahn, Volume II at p. 140.

Systems litigation, all court challenges to the failure to provide necessary network interconnection.²⁸

14. Mandatory interconnection is an obvious example of Congress and the Commission acting to meet the first two goals for establishing competition in the telecommunications industry: to encourage competitive entry and remove obstacles to such entry. However, mandatory interconnection brings with it an associated problem—the proper way to compensate companies for the taking of their networks for use by others.²⁹

The Constitutional Network Access Rate Requirement: Just and Reasonable Compensation

15. It is critical to keep in perspective that the network access rate issue is itself a regulatory artificiality caused by the direct interference with the normal market mechanisms, in this case by imposing mandatory network interconnection.³⁰ While interconnection is both necessary and desirable in order to create opportunities for competitive market entry, the reasons for making interconnection mandatory means that the market is unable to operate in this area. The very rights that mandatory interconnection creates—mutual network access—it creates by an economic taking, the value of which varies based on each participant’s actual costs (which, as is discussed in detail later, varies due to specific market characteristics including demographic density, topography, and system technologies).³¹ The proper solution must therefore consider these factors, and must recognize that no natural market exists to provide the solution. For if it were otherwise, *mandatory* interconnection would not be necessary. In creating the groundwork for an effective competitive market in retail consumer services, the Commission

²⁸ Wilson at p. 138. *See also* the discussion of the early MCI interconnection dispute in McNamara at pp. 32-33, 35. McNamara notes that the abuse of network interconnection was one of the key “bottlenecks” used by AT&T to suppress competition. *Id.* at p. 41.

²⁹ “A dominant theme in telecommunication policy is defining the rights and responsibilities for the interconnection of networks and the appropriate payments for interconnection under a wide variety of different conditions.” Brock at p. 62.

³⁰ Breyer notes that regulatory “...intervention is not costless. Moreover, intervention—or rearrangement of rights and liabilities—changes the distribution of wealth and income.” Breyer at p.25. This is exactly what occurred with the decision to impose mandatory interconnection.

³¹ “While Congress did not explicitly define ‘just and reasonable’ in the Communications Act, this report demonstrates that Congress clearly intended the Commission to ensure that charges for telecommunications services are based directly on their costs. This conclusion is supported by an unbroken line of FCC decisions which have consistently held that the ‘just and reasonable’ standard requires cost-based regulation.” Brock at p. 276. “[T]here are two familiar objections to our current interconnection regime. The first is that the FCC picked the wrong pricing model, thus stunting the future growth of networks. The second, related problem is that the rules violate the takings clause of the Constitution.” Singleton at p. 72. Kahn asserts a similar analysis: “But the regulatory commission soon finds, in framing its policies, that it cannot take the health on the supply side of the market for granted. For one thing, it has to reckon with legislative injunctions on it to be fair to investors, and with judicial warnings that it cannot, consistent with the Fourteenth Amendments (and corresponding injunctions in state constitutions), deprive [companies] of a fair return on the fair value of their investment.” Kahn, Volume II at p. 12. *See also* the discussion of the problems with using average costs beginning at Text ¶ 33 *infra*.

has simultaneously created a problem that cannot be solved by the private sector, itself a demonstration of the need for continued regulation in this particular area.³²

16. For these reasons, the Communications Act of 1934 has long mandated that telecommunications companies are entitled to “just and reasonable” compensation for interconnection.³³ This requirement was also expressly embodied in the 96 Act and repeatedly stressed by the Commission as it considered the expanded interconnection obligations of all carriers under the Act.³⁴

17. At the heart of this statutory and regulatory requirement lies the Takings Clause of the Fifth Amendment to the United States Constitution, which provides that “...private property [shall not] be taken for public use, without just compensation.” Both the United States Supreme Court and the Commission recognize that this prohibition applies to regulatory requirements imposed on telecommunications companies, particularly in the area of mandatory network interconnection,³⁵ and that it is the end result of regulation, not any particular regulatory framework or policy analysis, that determines whether this standard is violated.³⁶

³² Even Richard Posner, one of the foremost critics of telecommunications regulation, recognizes that “The resources and energies of government should be directed to problems that we know are substantial, that we think are tractable to government action, and *that cannot be left to the private sector to work out.*” Posner at p. 109. [Emphasis added.] Posner also predicted the possibility that the deregulation process itself could result in unintended consequences: “Regulatory efforts to eliminate monopoly profits may, therefore, if effective, often create fresh distortions in resource allocation.” *Id.* at p. 69. This is exactly what is now occurring in the rural community BSP markets. See Text beginning at ¶ 66.

³³ 47 U.S.C. Section 201(b). See also the Reply Comments of PrairieWave in the PrairieWave Petition at p. 4, ftn. 11.

³⁴ See Note 15, *supra*. “Sections 251, 252, 332 and 201 are designed to achieve the common goal of establishing interconnection and ensuring interconnection on terms and conditions that are just, reasonable, and fair. Local Competition Order at ¶1023. “...[I]nterconnection must be at least equal in quality to that provided by the incumbent LEC to itself or its affiliates, *and must be provided on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.*” Local Competition Order at ¶26 [Emphasis added]. “...[S]ections 251(c)(2), (c)(3), and (c)(6) establish the Commission’s legal authority under section 251(d) to adopt pricing rules *to ensure that the rates, terms, and conditions for interconnection...are just reasonable, and nondiscriminatory.*” *Id.* at ¶104. [Emphasis added.] See also *Id.* at ¶¶ 115, 213, and 217.

³⁵ “The Supreme Court has recognized that public utilities owned and operated by private investors, even though their assets are employed in the public interest to provide consumers with service, may assert their rights under the Takings Clause of the Fifth Amendment. In applying the Takings Clause to rate setting for public utilities, the Court has stated that ‘the guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so ‘unjust’ as to be confiscatory.’” Local Competition Order at ¶ 733. “The Supreme Court has held that the determination of whether a rate is confiscatory depends on whether that rate is just and reasonable...” *Id.* at ¶ 734.

³⁶ “Under the statutory standard of ‘just and reasonable’ it is the result reached not the method employed that is controlling. It is not the theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be just and reasonable, judicial inquiry under the Act is at an end.” *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. at 602, quoted in Local Competition Order at ¶ 734. “...Hope Natural Gas requires...that the end result of our overall regulatory framework provides LECs a reasonable opportunity to recover a return on their investment.” *Id.* at ¶ 737.

18. When framed in this light, the problem facing the Commission is how to provide for “just and reasonable” network access rates for BSPs. Here the Commission has examined three possible solutions: (1) the use of incumbent proxy rates, (2) the use of bilateral negotiated rate agreements, and (3) cost based regulatory rulemaking, each of which is discussed in detail below. PrairieWave believes that the Commission properly adopted the rulemaking alternative in its Local Competition Order, only to erroneously reject it as applied to CMRS (cellular) operators and in the later CLEC Access Orders. As will be seen below, the result of this regulation as applied to BSPs has been an unconstitutional taking of BSP property. That is, current regulation requires mandatory access to BSP networks, but establishes access rates that are both unjust and unreasonable.³⁷

Part II: Current BSP Access Regulation Results in Unfair BSP Network Access Rates

The CLEC Access Orders Are Inherently Flawed as Applied to Rural BSPs

19. The CLEC Access Orders represent a very confusing chapter in the history of telecommunications interconnection access compensation.³⁸ Based on very little factual evidence and using flawed economic analysis, these Orders imposed incumbent benchmark rates on rural BSPs in spite of a myriad of differences that make this clearly erroneous. The CLEC Access Orders are based on four premises, none of which are persuasive in the BSP rural market setting. These premises include: (1) Metropolitan CLEC reseller abuses of the filed rate doctrine require abandonment of company specific access rates, (2) Incumbent access rates are set by market forces and should be established as benchmark proxy rates, (3) The regulatory burden of company specific access rates is too high, and (4) Administrative simplicity requires the use of benchmark rates instead of company specific rates. Each of these reasons is analyzed in detail below. When we then combine the analytical flaws of these reasons with the very real problems the Orders are causing in the BSP markets, the conclusion is obvious—current BSP access rate regulation is inherently flawed.

³⁷ The critical test of this conclusion is whether current access rate regulations provide for adequate returns to capital. “...[I]n determining whether a rate is reasonable, the regulatory body must balance the interests of both the investor and the consumer. ‘From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business.... The return on the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.’” Local Competition Order at ¶ 735, citing *Hope Natural Gas* at 603. This standard is widely recognized in the economics literature: “What the company is entitled to as is a fair return upon the value of that which it employs for the public convenience.” *Munn v. Illinois*, 169 U.S. 466, 546-547 (1898), cited in Kahn, Volume I at p. 37. “As long as regulation treats investors sufficiently well, by the acid test of the competitive capital-market place, to enable the regulated companies to raise whatever funds they need to provide acceptable service, the Court seemed to say, it would pose no additional tests or obstacles.” Kahn, Volume I at p. 40, citing *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). As will be discussed in more detail in Note 107, below, this “acid test” is failing miserably in small rural markets, as PrairieWave has been unable to raise additional capital for new market entry since the Commission’s 2001 CLEC Access Order.

³⁸ Anderson is highly critical of the CLEC Access Orders. See Anderson, beginning at page 20, for a comprehensive analysis of the rationale behind the CLEC Access Orders and the problems that they create for rural telecommunications competitors. Much of this earlier analysis is summarized below as applied to rural BSPs.

The CLEC Access Orders Responded to Metropolitan Area CLEC Reseller Abuses of the Filed Tariff Doctrine, Not to Problems with Rural Market BSP Cost Based Access Rates

20. In the CLEC Access Order I, the Commission noted its success in using tariffs based on forward-looking economic cost models in the ILEC access area.³⁹ Nevertheless, the CLEC Access Order I declined to use the forward-looking economic cost study approach so successfully employed in the ILEC area and instead decided to use incumbent access rates as surrogate benchmarks for CLEC access rates.⁴⁰ The CLEC Access Order I ignored the Commission's prior work, concluding that "...we lack an established framework for translating CLEC costs into access rates"⁴¹ when, in fact, it did have the exact framework necessary to translate BSP access costs into appropriate and fair rates—the forward-looking economic access cost model.⁴² What it did lack was the cooperation of the CLEC resellers participating in the proceeding in providing the data necessary to make the forward-looking economic cost data available for Commission's review.⁴³ Why did the Commission act without the relevant data?

21. First, the CLEC Access Order I expresses concern that some CLECs were using the filed tariff doctrine to impose access rates on IXC's that improperly shifted costs towards access revenue recovery.⁴⁴ Second, as a direct result, the Commission was seeing a rapidly growing

³⁹ "Incumbent LECs ... are closely regulated in their ratemaking to ensure that their interstate access charges are just and reasonable. In recent years, the Commission has repeatedly examined access rates, attempting to make them more economically rational. Some of the overarching goals the Commission has pursued in this effort include the promotion of competition, aligning access rate structures more closely with the manner in which costs are incurred, the removal of subsidies from access rates and deregulation as competition develops. The result of the Commission's efforts has been a steady reduction in access charges and in long distance rates which, in turn, has dramatically increased consumer usage of long distance service. Historically, ILEC access charges have been the product of an extensive regulatory process by which an incumbent's costs are subject to detailed accounting requirements, divided into regulated and non-regulated portions, and separated between the interstate and intrastate jurisdictions. Once the regulated, interstate portion of an ILEC's costs is identified, our access charge rules specify in detail the rate structure under which an incumbent may recover those costs. This process has yielded presumptively just and reasonable access rates for ILECs." CLEC Access Order I, ¶ 41.

⁴⁰ CLEC Access Order I, ¶ 4.

⁴¹ CLEC Access Order I, ¶ 46.

⁴² See Text Part IV and accompanying Notes beginning at ¶ 103, *infra*.

⁴³ See Notes 94 and 5, *infra*, and Note 220, *infra*.

⁴⁴ "...[T]here can be little question that CLECs are adding dramatically to the overall level of access charges that IXC's are paying. We are concerned that the higher CLEC rates may shift an inappropriate share of the carriers' costs onto the IXC's and, through them, the long distance market in general." CLEC Access Order I, ¶ 22. It is ironic to note that while the arbitrary CLEC behavior in large markets at the time of the Order in large part caused the Commission to act, the exact opposite is actually occurring in RLEC markets as a direct result of the CLEC Access Orders as access rates are forced substantially *below* actual costs. As is discussed in more detail below, the only way to stop this seesawing back and forth based on disparate circumstances is by setting access rates based on company specific forward looking economic costs, whether accomplished by general rule making or through the waiver process.

problem with CLEC tariffs and access rates.⁴⁵ Those proceedings were also indicating a large problem with these rates, given that CLECs were largely unregulated at that time.⁴⁶ As a result, the Commission felt under great pressure to address the issue.⁴⁷

22. PrairieWave agrees that the situation that caused the Commission to act in the CLEC Access Order I needed to be addressed. The Commission was correct to conclude under these circumstances that “...we are ...reluctant to permit CLECs to continue to tariff the access rates they charge IXCs *at the level they see fit*, without any guidelines to ensure their reasonableness.”⁴⁸ [Emphasis added.] However, PrairieWave sees nothing in these reasons that justify abandoning company specific cost analysis in favor of incumbent benchmark rates. In fact, PrairieWave believes that the application of company specific costs is exactly the right response, since the application of forward looking economic cost prevents the very abuse of arbitrary cost allocations that caused these disputes.⁴⁹

23. *It was the Commission’s own lapse in allowing CLECs to set their network access rates without any regulatory oversight that caused this problem.*⁵⁰ Even the CLEC Access Order I recognizes the value of a properly determined access tariff filing: “[...]We recognize the

⁴⁵ “Although the access charge debate previously has focused primarily on dominant carriers, as CLEC market share has increased, a correspondingly greater interest in the rates of competitive carriers has developed. As a result, CLEC access charges recently have been the subject of several Commission proceedings and the filings of several parties.” CLEC Access Order I, ¶ 9.

⁴⁶ CLEC Access Order I, ¶¶ 11, 15-17, 20.

⁴⁷ “Reacting to what they perceive as excessive rate levels, the major IXCs have begun to try to force CLECs to reduce their rates. The IXCs’ primary means of exerting pressure on CLEC access rates has been to refuse payment for the CLEC access services. ...We see these developments as problematic for a variety of reasons. We are concerned that the IXCs appear routinely to be flouting their obligations under the tariff system. Additionally, the IXCs’ attempt to bring pressure to bear on CLECs has resulted in litigation both before the Commission and in the courts. And finally, the uncertainty of litigation has created substantial financial uncertainty for parties on both sides of the dispute. This uncertainty, in turn, poses a significant threat to the continued development of local-service competition, and it may dampen CLEC innovation and the development of new product offerings.” CLEC Access Order I, ¶ 23. “Additionally, IXCs have threatened to stop delivering traffic to, or accepting it from, certain CLECs that they view as over-priced. ...These practices threaten to compromise the ubiquity and seamlessness of the nation’s telecommunications network and could result in consumer confusion. Once one or more IXCs refuse to do business with a CLEC, it will become impossible for that CLEC’s end users to reach, or receive calls from, some parties outside of the local calling area. If such refusals to exchange traffic were to become a routine bargaining tool, callers might never be assured that their calls would go through. We are particularly concerned with preventing such a degradation of the country’s telecommunications network. It is not difficult to foresee instances in which the failure of a call to go through would represent a serious problem, and, in certain circumstances, it could be life-threatening. Accordingly, the public interest demands a resolution to this set of problems.” *Id.* at ¶ 24. Note that this is another ramification of the ubiquitous nature of telecommunication networks and the value of mandatory interconnection.

⁴⁸ CLEC Access Order I, ¶ 37.

⁴⁹ See the discussion in Part IV, beginning at ¶ 103, *infra*.

⁵⁰ CLEC Access Order I, ¶ 37.

attraction of a tariffed regime because it permits CLECs to file the terms on which they will provide service and to know that, absent some contrary, negotiated agreement, any IXC that receives access service is bound to pay the tariffed rates.”⁵¹ The issue, of course, is how to properly determine those rates. PrairieWave believes that the application of tariff based on forward-looking economic access costs is the best way to proceed, if only on a case-by-case basis, and certainly in rural BSP markets. The CLEC Access Order I, unfortunately, takes a very different approach.

The Impossibility of Market Based Network Access Rates in Rural BSP Communities

24. The first and major reason relied upon in the Order to support the imposition of incumbent benchmark access rate caps is the *assumption* that the application of incumbent rates is appropriate on the theory that these rates represent market rates established in a competitive environment.

“...in setting the level of our benchmark, we seek, to the extent possible, to mimic the actions of a competitive marketplace, in which new entrants typically price their product at or below the level of the incumbent provider. We conclude that the benchmark rate, above which a CLEC may not tariff, should eventually be equivalent to the switched access rate of the incumbent provider operating in the CLEC’s service area.”⁵²

25. There is only one problem with this approach: *There is no competitive access market between incumbents and BSPs that results in market set access rates. Rather incumbent rates are set through cost-based regulation using cost averaging processes that are wholly inappropriate when applied to BSP markets.*⁵³

The Nonexistent Network Access Market

26. The network access market is not competitive. In fact, as a practical matter, there is no functioning network access “market” at all, especially in BSP communities. PrairieWave is not aware of a single competitive access provider that now operates, or has operated, in any of its small community markets. PrairieWave notes the curious fact that to its knowledge, none of the 349 competitive local access providers cited in the Order⁵⁴ continue in business today as solely access providers. Rather, they have been absorbed into service companies or diversified themselves into service companies. The reason is two-fold: (1) the CLEC Access Orders have

⁵¹ CLEC Access Order I, ¶ 42.

⁵² CLEC Access Order I, ¶ 42.

⁵³ CLEC Access Order II also addresses this issue, but instead of providing further analysis, it merely repeats the CLEC Access Order I assertion that this was appropriate since it would “...mimic the actions of a competitive marketplace, in which new entrants typically price their product at or below the level of the incumbent provider.” CLEC Access Order II, ¶ 29. What both Orders overlook in rural areas is that prices are set with respect to incumbent prices only for actual retail customers where the two compete, and that no effective competition exists between BSPs and incumbents with respect to network access and the related rates, as is discussed in detail below.

⁵⁴ CLEC Access Order I, ¶ 116.

created an economic environment where the access rate caps are far below actual costs, effectively preempting market entry on an access only basis and (2) there is no practical way for a true access market to develop, let alone generate effective access rate price signals.⁵⁵

27. There is a powerful economic reason why this is the case. The value of the ubiquitous network does not “...play a part in the individual user’s decision to subscribe, or more importantly not to subscribe, to the service.”⁵⁶ Put another way, the inability of individual subscribers to recognize the value of a ubiquitous network leads to what economists term the “free rider” problem. In the context of network access, it simply means that retail subscribers will not create the proper demand and pricing signals to establish a competitive market price for network access.⁵⁷

⁵⁵ The Commission considered this last point in great detail in the CLEC Access Order I: “CLEC use of this [tariff filing] strategy raises questions about the extent to which CLECs truly are subject to competition in their provision of access service. The Commission has previously noted the unique difficulties presented by the case of terminating access, where the called party is the one that chooses the access provider, but it neither pays for terminating access service, nor does it pay for, or choose to place, the call. It further complicates the case of terminating access that an IXC may have no prior relationship with a CLEC, but may incur access charges simply for delivering a call to the access provider’s customer. In these circumstances, providers of terminating access may be particularly insulated from the effects of competition in the market for access services. The party that actually chooses the terminating access provider does not also pay the provider’s access charges and therefore has no incentive to select a provider with low rates” CLEC Access Order I, ¶ 28. “On further consideration, it appears that the CLECs’ ability to impose excessive access charges is attributable to two separate factors. First, although the end user chooses her access provider, she does not pay that provider’s access charges. Rather, the access charges are paid by the caller’s IXC, which has little practical means of affecting the caller’s choice of access provider (and even less opportunity to affect the called party’s choice of provider) and thus cannot easily avoid the expensive ones. Second, the Commission has interpreted section 254(g) to require IXCs geographically to average their rates and thereby to spread the cost of both originating and terminating access over all their end users. Consequently, IXCs have little or no ability to create incentives for their customers to choose CLECs with low access charges. Since the IXCs are effectively unable either to pass through access charges to their end users or to create other incentives for end users to choose LECs with low access rates, the party causing the costs – the end user that chooses the high-priced LEC – has no incentive to minimize costs. Accordingly, CLECs can impose high access rates without creating the incentive for the end user to shop for a lower-priced access provider. “*We now acknowledge that the market for access services does not appear to be structured in a manner that allows competition to discipline rates.*” *Id.* at ¶ 31 [emphasis added]. See also CLEC Access Order I, ¶ 29. This is because network access is an “intermediate service,” and not readily transparent to the retail subscriber. Moreover, the fact that each telephone line can have only one provider makes that provider the *de facto* monopolist with respect to access to that line. See Kahn, Volume II at p. 123, ftn. 25.

⁵⁶ Wilson at pp. 58-59.

⁵⁷ See Sharkey at p. 46: “...an individual may understate his or her value of the good and enjoy consumption without paying the proper price, or in extreme cases, without paying anything at all. This phenomenon [is] known as the “free-rider” problem...” As we shall later see, this is exactly what is occurring in the access markets PrairieWave’s small communities as the use of incumbent access rate caps results in PrairieWave’s competitors enjoying a subsidized “free ride” over PrairieWave’s network. See the Text and accompanying notes beginning at ¶ 61 and then, again, at ¶ 73 *infra*.

Incumbent Access Rates Are Not BSP Market Rates

28. From the foregoing, it is apparent that *incumbent access rates are not market prices and are not set through the operation of a competitive market*. This is especially true in BSP markets for several reasons:

Incumbent Market Definition Differs From BSP Markets, Resulting in Below Cost Rates

29. One of the major problems with applying incumbent access rates to BSPs is that the incumbent rates are not defined using the same market area. Both the size and location(s) of the “markets” used to establish incumbent access rates (known as “Study Areas”) are not congruent. In fact, there is a major mismatch between the markets in which the BSPs operate and the markets used to set ILEC rates. The Commission itself has recognized that adopting incumbent prices as a proxy for other carriers is only appropriate where geographic market areas are largely identical.⁵⁸

30. Incumbents, especially the RBOC incumbents that most BSPs compete against, enjoy an unfair advantage due to their size and their ability to spread their network costs over a larger subscriber base in denser, less costly markets. This means that using incumbent access rates as benchmark rates for BSPs is an unreasonable and analytically flawed comparison, as demonstrated by PrairieWave’s filing.⁵⁹

⁵⁸ “[W]e conclude that it is reasonable to adopt the incumbent LEC’s transport and termination prices as a presumptive proxy for other telecommunications carriers’ additional costs of transport and termination. *Both the incumbent LEC and the interconnecting carriers usually will be providing service in the same geographic area, so the forward-looking economic costs should be similar in most cases.*” Local Competition Order at ¶ 1085 [emphasis added]. The problems of geographic rate averaging in mismatched market areas is discussed in more detail below.

⁵⁹ “Limiting CLECs to the higher of the benchmark rate or the access rate of its ILEC competitor could prove rather harsh for some of the small number of CLECs that operate in rural areas. The difficulty would likely arise for those CLECs that operate in a rural area served by a price-cap incumbent with state-wide operations. Our rules require such ILECs to geographically average their access rates. This regulatory requirement causes these “non-rural ILECs” effectively to use their low-cost, urban and suburban operations to subsidize their higher cost, rural operations, with the effect that their state-wide averaged access rates recover only a portion of the ILEC’s regulated costs for providing access service to the rural portions of its study area. During the course of this proceeding, we became concerned that tying the access rates of rural CLECs to those of such non-rural ILECs could unfairly disadvantage CLECs that lacked urban operations with which they could similarly subsidize their service to rural areas.” CLEC Access Order I, ¶ 64. “...rural carriers are significantly different from non-rural carriers, and that individual rural carriers vary widely from each other. Rural carriers generally serve more sparsely populated areas and fewer large, high-volume subscribers than non-rural carriers. The isolation of rural carrier service areas creates numerous operational challenges, including high loop costs, high transportation costs for personnel, equipment, and supplies, and the need to invest more resources to protect network reliability. In addition, rural carriers generally have fewer customers per switch, higher total investment in plant per loop, and higher plant specific expenses per loop than non-rural carriers, all of which may vary dramatically depending on how many lines they serve.” ILEC Access Order, ¶ 28. “[R]ural competitive LECs experience higher costs, particularly loop costs, and may lack the lower cost urban operations that non-rural incumbent LECs use to subsidize rural operations.” CLEC Access Order II, ¶30. This is exactly the problem faced by PrairieWave. See PrairieWave Petition”) at ¶ 6: “PrairieWave has prepared a FLEC study for the Commission to review and to provide the economic basis for its proposed access charges. The study demonstrates that the cost-based, per-minute switching rate for the interstate jurisdiction to be \$0.014942 and for transport \$0.035937, for a composite

31. These differences require the Commission to return to its consideration of company specific forward looking economic access costs in setting BSP rates, and demonstrates the inapplicability of large incumbent access rate as proxy rate caps. This is exactly what the Commission decided in the ILEC Access Order.⁶⁰

32. Here is where the direct comparison between small rate-of-return ILECs and BSPs comes into focus. The use of incumbent access rates to set rate caps might be appropriate when the CLEC in question operates in a large metropolitan area with a comparable cost basis or operates using the incumbent's underlying network elements or on a resale basis. In this situation, the use of incumbent rates is likely the best "market based" surrogate, a conclusion that the Commission actually adopted in the CLEC Access Order I.⁶¹ But extending this analysis to true facilities based BSPs operating in small, high cost communities is inherently unfair. In rural parlance: It is comparing "apples and oranges." Moreover, as noted above, it is simply erroneous because *there is no competitive access market between incumbents and BSPs, making rate competition a myth and exposing a fatal flaw in the Order's conclusion that incumbent access rates are somehow "market" rate, at least for BSP markets.*⁶²

Average Costing is Not Appropriate for Market Specific BSP Access Rates

33. It is worthwhile to pause and consider the additional problems of using average costing to set rates. The Commission has also investigated this area in great depth.

34. "...[G]eographic averaging is simple to administer and prevents unreasonable or unlawful rate differences but, *where averaging covers high and low cost areas, it could distort*

per minute rate of \$0.050879. ...The composite rate for the incumbent Qwest for all elements is \$0.0066, which is the rate PrairieWave is obliged to charge effective June 20, 2004 pursuant to CLEC Order I and as codified in 47 C.F.R. ¶ 61.26(c). The difference in the cost-based pricing, whether demonstrated by the FLEC study or the NECA tariff, and the arbitrarily selected incumbent benchmark, is staggering."

⁶⁰ "The Commission also has considered proposals for adoption of a target rate for the per-minute access charges of rate-of-return carriers, either on an optional or a mandatory basis. The Commission rejects these proposals and concludes that none of these proposals is supported by cost data and that the non-prescriptive, market-based approach to access charge reform adopted in the Order is more consistent with the competitive and universal service goals of the 1996 Act. The comments filed in this proceeding indicate a wide variation in cost patterns, density, and other operational characteristics among rate-of-return carriers. The access charge reform approach adopted in this Order accommodates this diversity by reallocating costs and removing implicit support to create more efficient rate structures, while allowing carriers to establish rates based on their own costs." ILEC Access Order, ¶ 324.

⁶¹ "...in setting the level of our benchmark, we seek, to the extent possible, to mimic the actions of a competitive marketplace, in which new entrants typically price their product at or below the level of the incumbent provider. We conclude that the benchmark rate, above which a CLEC may not tariff, should eventually be equivalent to the switched access rate of the incumbent provider operating in the CLEC's service area." CLEC Access Order I, ¶ 42.

⁶² See the discussion beginning at ¶ 26, *supra*.

competitors' decisions whether to ...build their own facilities."⁶³ [Emphasis added.] The Commission decided that simplification of rate determination via cost averaging is not in itself justified or appropriate. "We agree with most parties that deaveraged rates more closely reflect the actual costs of providing interconnection... Thus, *we conclude that rates for interconnection ... must be geographically deaveraged.*"⁶⁴ [Emphasis added.] And again, later in the Order: "...[W]e believe that cost-based rates should be implemented on a geographically deaveraged basis."⁶⁵ Why these conclusions were later abandoned in the CLEC Access Orders is a serious question of regulatory error.

35. The Commission acknowledged this same issue in analyzing CLEC network access rates. "We acknowledged that CLEC access rates may, in fact, be higher due to the CLECs' high start-up costs for building new networks, their small geographical service areas, and the limited number of subscribers over which CLECs can distribute costs."⁶⁶ With regard to the small rate of return ILECs, the Commission even quantified the problem of operating in largely rural areas:

"For example, our forward-looking economic cost model shows that the cost of providing a local loop in a rural area may be approximately one hundred times greater than the cost in an urban area."⁶⁷

36. As will be discussed in more detail below, these very types of cost variances have resulted in rates that are far below actual forward looking economic costs in BSP markets, leading to significant market distortions and stalling the continued deployment of advanced broadband networks in rural America.⁶⁸

⁶³ Local Competition Order, ¶ 758.

⁶⁴ *Id.* at ¶ 764.

⁶⁵ *Id.* at ¶ 797.

⁶⁶ CLEC Access Order I, ¶ 18. Industry commentators have also recognized that costs can legitimately vary from market to market. *See* Posner at p. 32.

⁶⁷ ILEC Access Order, ¶ 45.

⁶⁸ Kahn views average cost pricing in the telecommunications industry as nothing more than outright cross-subsidization: "...[S]ystem-wide average cost pricing by the carriers involves internal subsidization..." Kahn, Volume II at p. 230. Posner is also highly critical of the distortions caused by improper cost averaging. "...there is a good deal of evidence that grossly inefficient pricing is widespread in the regulated industries. For example, a striking characteristic of the rate structures of regulated companies is the frequency with which the costs of providing different services or of providing the same service in different areas are averaged together and a single rate charged that appreciably exceeds the cost of serving some customers and is far below that of serving others. The charge for a long-distance telephone call of a given distance and duration is the same everywhere in the continental United States even though it is plain that differences of terrain and density make costs on different routes vary widely (often, I am informed by industry sources, by as much as 10 to 1)." Posner at pp. 70-71. His concern is as much about the misallocation of resources caused by such internal subsidies as about the impact on competition. *Id.* at p. 73. "Internal subsidization is one seeming example of the perverse effects of regulation on pricing efficiency..." *Id.* at p. 75.

37. The Commission also specifically considered the impact of geographic cost and rate differences on the nondiscrimination standards of the Act and found them to be perfectly in compliance. The Commission concluded: “Where costs differ, rate differences that accurately reflect those differences are not discriminatory.”⁶⁹ This was again reaffirmed in CLEC Access Order I: “...this Commission has twice ruled, in essence, that a CLEC’s rate is not per se unreasonable merely because it exceeds the ILEC rate.”⁷⁰ And the underlying reason is the variance in the incumbent and CLEC network cost basis. The abandonment of this reality-based view of actual rural telecommunications operations in later portions of the Order makes it internally contradictory and has led to the market distortions discussed below.

38. The Commission has also recognized that using deaveraged costs as the foundation for local service and access charges would be the best mechanism to encourage fair competition:

“...the Commission granted price cap carriers flexibility to deaverage SLC rates under certain conditions, concluding that such flexibility would ‘enhance the efficiency of the local telephone market by allowing prices to be tailored more easily and accurately to reflect costs and, therefore promotes competition in both urban and rural areas’”⁷¹

39. The Commission’s conclusions are well founded. Costs are what they are. Actual costs have a stubborn truth to them, and reality does not go away simply because we wish to streamline or simplify regulatory policies. One part of that reality is that costs vary by geographic region, topography, technologies employed, and by population densities. Thus the Commission noted, “...many more parties oppose the use of such nationally-average cost data. These parties argue that nationally-averaged data ignore geographical divergent factors and the interests of small or rural LECs, do not account for variance of cost between incumbent LECs, and do not reflect the true cost of the service.”⁷² Economists have also recognized this disparity of costs, especially in the rural BSP setting,⁷³ as well as the severe market distortions

⁶⁹ Local Competition Order, ¶ 860.

⁷⁰ CLEC Access Order I, ¶ 37.

⁷¹ ILEC Access Order, ¶ 37.

⁷² Local Competition Order, ¶ 778.

⁷³ “[T]he costs of operating a local exchange in an urban area are less than those associated with operating a comparable service in a rural area where distances between the central office and users are greater and numbers of subscribers are fewer.” Wilson at p. 59. Huber summarizes this point in his usual succinct way: “The cost of wire networks increases as population density decreases; rural customers cost more to serve than urban ones. ...Price averaging cannot coexist with competition, at least not when it costs much more to serve some customers than others.” Huber at pp. 137, 140. “Potential competition and fairness considerations may therefore call for tariffs being squarely based on cost.” Mitchell & Vogelsang at p. 24. Kahn also firmly supports the use of company-specific costs: “The marginal costs against which competitive rates should be judged are the costs of the company quoting or proposing to quote those rates, *not the costs of their competitors.*” Kahn, Volume I at p. 164 [emphasis original]. Moreover, the average RBOC costs and rates relied upon by the Commission exclude the very small communities that we are addressing here. “[R]ate uniformity in other than interstate long distance rates may be a mirage rather than a reality, and AT&T is not heavily involved in serving truly low-density rural locations today

that follow when actual costs are not used as a basis for rates, pricing and investment decisions.⁷⁴ Based on these decisions and the sound underlying economic analysis, PrairieWave and other BSPs proceeded with their small community developments on the eminently reasonable assumption that their access rates would be set based upon actual market costs, not artificially low incumbent rate caps, and stopped committing to new market entry in 2001 after the CLEC Access Order I was issued.⁷⁵

Incumbent Access Rates Are Set By Regulation, Not By The Market

40. In light of the foregoing this may be stating the obvious, but competitive markets do not set incumbent network access rates. *Whether using price cap or rate-of-return analysis, all incumbent LEC network access rates are set by the Commission's regulatory process based on some form of cost analysis, not based on market interactions.* While BSPs like PrairieWave engage in effective price competition with incumbents with respect to retail subscribers, no effective competition exists to set prices in the access environment. Further, incumbent networks were built under the protection of monopoly rate of return prices, allowing the incumbents to recover their costs at rates that were substantially higher than today's rates. To take these regulatory rates established using large study areas that average high and low cost markets out of their historical context and then assume that these rate are appropriate "market prices" for any specific market simply because the incumbent is a retail competitor of an BSP is an economically erroneous analysis.

41. For all of these reasons, there are no market rates that can be used to set BSP network access compensation and, except for the CLEC access decisions, the Commission has properly rejected market rates as an available mechanism for setting network access rates. One should not be surprised by this conclusion. The network compensation problem is created by the regulatory interference in the market in the form of mandatory interconnection. While this is entirely appropriate, indeed even required, to establish competition in the telecommunications

and never was." McNamara at p. 90. In other words, *the very cost averages used by the Commission in its CLEC rate determinations ignored the costs of serving the small rural markets.*

⁷⁴ Sharkey at p. 208. Kahn notes the general regulatory presumption in favor of recognizing geographical differences: "Efficient pricing of public utility services call for as fine a differentiation as practical of rates for the various services provided, *in various locations*, so as to reflect the different marginal costs of each." Kahn, Volume I at p. 103 [emphasis added]. McNamara discusses this problem using the historical example of interstate long distance competition: "...[S]ince costs vary geographically, rate averaging has resulted in underpricing some routes and overpricing others. The high-density-long distance routes were probably the most overpriced, and it was these routes that attracted competition. ...It was the practice of charging toll rates substantially higher than cost and remitting part of the resulting excess revenues to local companies...that initially attracted competition in some toll markets. ...While interstate toll charges remain above competitive levels, uneconomic entry is encouraged in the interstate market, and the interstate common carriers have incentives to respond to this competition in uneconomic ways, including, but not limited to, bypassing the local exchange companies." McNamara at pp. 103-104. As will be discussed in detail later, ignoring actual costs in favor of proxy company average access rates is having the unsurprising result of distorting investment decisions in the rural community local network markets as well.

⁷⁵ See Text at ¶ 59 and accompanying Notes, *infra*.

industry, it is required precisely because there is no market mechanism to establish competitive interconnection or the appropriate rates.

The Regulatory Burden of BSP Specific Company Costing is Not Onerous

42. As a second reason supporting the use of incumbent benchmark access rate caps, CLEC Order I cites the burden and cost of regulatory oversight of the accounting and cost study process. “[W]e are especially reluctant to impose similar legacy regulation on new competitive carriers. We note that no CLEC has suggested that we adopt such a heavily regulatory approach to setting their access rates.”⁷⁶ However, the assumption that preparing forward-looking cost studies is too burdensome, complicated and costly is simply untrue with respect to rural BSPs.⁷⁷

43. CLEC Access Order I’s conclusion that the incumbent benchmark is justified by “... the extreme difficulty of establishing a ‘reasonable’ CLEC access rate given the historical lack of regulation on the process of CLEC ratemaking”⁷⁸ is not supported by the record or, rather, is a conclusion that results from the notable lack of industry cooperation rather than any inherent difficulty in preparing the data.⁷⁹ The preparation of a forward-looking economic access cost study is neither difficult nor expensive, and PrairieWave’s filing is self evident on this point.⁸⁰ Further, such a study does not depend in any way on a prior lack of regulation *per se*. It is based on *forward*-looking economic costs, not historical regulation. It is simply one more in a

⁷⁶ CLEC Access Order I, ¶ 41.

⁷⁷ See Anderson at pp. 25-27, beginning at ¶ 61. PrairieWave provides an excellent real world refutation of the Order’s position on this matter. PrairieWave operates as complicated a telecommunications business as could be possible, even given its small size. It operates as both an ILEC and a CLEC, necessitating appropriate intercompany allocations. It operates in three states and as an interstate long distance carrier, involving complex jurisdictional allocations. And it operates as a broadband provider of integrated telephone, cable and Internet services, necessitating complex allocations of its network and operating revenues and costs between and among the various regulated and nonregulated businesses. Yet once its first full year audit was complete, it was able to produce an interstate forward looking cost study (filed as part of the PrairieWave Petition) and three separate state cost studies on both a historical and forward looking cost basis, all within approximately 6 months at a total cost of approximately \$71,200. This is hardly the “heavy regulatory” burden claimed by the large metropolitan CLEC resellers.

⁷⁸ CLEC Access Order I, ¶ 44(4).

⁷⁹ It is also possible that the timing of the Commission’s initial CLEC decision, though required by the obvious abuses by a few early metropolitan area CLECs, made the development of complete costs studies impractical because the CLEC networks had not been established long enough to gather and audit the data. It has taken PrairieWave two years to complete a full year of audited data and related cost studies since it acquired the Dakota operations, though the mechanics of the underlying Part 32 accounting system and the cost study process itself are relatively straightforward and well understood by the company.

⁸⁰ The Commission has made short work of similar complaints by small CLECs involving their alleged inability to change their billing systems to handle access billing complexities. See for example the Commission’s resolution of the Z-Tel waiver request in CLEC Access Order II, ¶ 63. If the Commission would take similar steps in the CLEC access rate cost study area, it could make short work of the BSP market distortions.

series of analytical errors that have led to devastating results in competitive rural broadband markets.

IXC Rate Averaging is not Significantly Impacted by Rural BSP Specific Access Rates

44. An additional reason cited in the Order to support the use of incumbent benchmark rate caps is the potential adverse impact of divergent network access rates on the IXCs' obligation to set national average rates.⁸¹ Note that this concern is only a problem if the costs included in the determination of access rates are, in fact, arbitrary or otherwise improper. The use of the forward-looking economic cost study process prevents this result, and in a way that fosters the efficient allocation of capital and encourages local competition.⁸²

45. The fundamental issue underlying this concern is the long distance consumer rate averaging doctrine. Nationwide long distance rate averaging as a favorable consumer concept designed to ensure uniform pricing and service availability has long been a Commission goal.⁸³

46. Notice that it is precisely because of the network cost and access rate differences in small communities and rural areas that the Commission adopted the long distance rate averaging rules. It is completely inconsistent with this rationale to now use the implications of BSP access cost variances to impose rate averaging on the local and regional owners and operators of the network, especially in a BSP situation. BSPs do not have national customer bases and therefore they do not have the ability to average costs, especially those who operate only in higher cost rural communities. The Commission recognized this very problem in the CLEC Access Order I.⁸⁴

⁸¹ "We are concerned that, in this environment, permitting CLECs to tariff *any rate that they choose* may allow some CLECs inappropriately to shift onto the long distance market in general a substantial portion of the CLECs' start-up and network build-out costs." CLEC Access Order I, ¶ 33 [emphasis added] "... there is ample evidence that the combination of the market's failure to constrain CLEC access rates, our geographic rate averaging rules for IXCs, the absence of effective limits on CLEC rates and the tariff system create an arbitrage opportunity for CLECs to charge unreasonable access rates." *Id.* at ¶ 34.

⁸² See the discussion beginning at Text ¶ 103 and accompanying Notes, *infra*.

⁸³ "Under section 254(g) of the Act, interexchange carriers bear the cost of averaging on a nationwide basis the different per-minute switched access rates charged by LECs." ILEC Access Order, ¶ 64. This is properly so, since it is the IXC carriers that have the national subscriber base necessary to average these costs across the entire country. "In section 254(g) of the Act, Congress codified the Commission's pre-existing geographic rate averaging and rate integration policies. The Commission implemented section 254(g) by adopting two requirements. First, providers of interexchange telecommunications services are required to charge rates in rural and high-cost areas that are no higher than the rates they charge in urban areas. This is known as the geographic rate averaging rule. Second, providers of interexchange telecommunications services are required to charge rates in each state that are no higher than in any other state. This is known as the rate integration rule. In the *Geographic Rate Averaging Order*, the Commission explained that geographic rate averaging benefits rural areas by providing a nationwide telecommunications network whose rates do not reflect "the disproportionate burdens that may be associated with common line recovery costs" in rural areas. The Commission also noted that geographic rate averaging ensures that rural customers will share in lower prices resulting from nationwide interexchange competition." ILEC Access Order, ¶ 179.

⁸⁴ "Our rules require such [large] ILECs to geographically average their access rates. This regulatory requirement causes these 'non-rural ILECs' effectively to use their low-cost, urban and suburban operations to subsidize their

47. Averaging is possible only when the companies in question operate on a national scale and can therefore average the costs across a truly national subscriber base. This is precisely why cost averaging has historically been imposed on IXC's via cost-based access rates under section 254(g) and USF contributions (and why it should now be imposed on their fast emerging competitive cousins, the national cellular carriers and now the VoIP companies).⁸⁵ In its consideration of rural access rates for small rate of return carriers, the Commission specifically addressed this issue and declined to ease the averaging burden imposed on IXC's by forcing below cost access rates on the ILEC's:

“While we recognize that rate disparities may create pressure on interexchange carriers to deaverage long distance toll rates, contrary to the requirements of section 254(g), we reject the proposition that we should address this problem by prescribing below-cost rates. Rate disparities are due partly to rate structure differences that we address in this Order, and partly to actual cost differences between price cap and rate-of-return carriers, as well as among rate-of-return carriers themselves.”⁸⁶

48. This is consistent with the historical development of cost averaging, where averaging via long distance rates was specifically preferred to passing through the entire cost of the local connection to the local service user, a decision that was based squarely on fairness considerations in rural areas.⁸⁷ What is happening today can be likened to the swinging of a pendulum, this time resulting in a over allocation of network costs to local subscribers as opposed to long distance users, at least in the BSP areas.

49. PrairieWave believes that this is precisely the analysis that should be applied in the case of BSPs, and for very good reasons as will be discussed in detail below. Averaging as applied to geographically isolated BSPs has the effect of setting access rates below costs and therefore sending precisely the wrong price and investment signals to the BSP and discouraging new competitive investment. This is exactly the opposite of what the Commission intended to accomplish and is directly attributable to CLEC Access Order I's bypassing the forward-looking economic cost model. This problem is especially acute in the small communities and rural areas of the country. Traditionally, the RBOCs and the other larger telephone companies ignored these areas precisely because of the high investment and service costs. This led to the creation of the independent local exchange carriers and, today, to the establishment of local and regional facilities based BSPs (more frequently than not offshoots of independent ILEC's). These companies understand the unique needs of the smaller communities and are willing to

higher cost, rural operations, with the effect that their state-wide averaged access rates recover only a portion of the ILEC's regulated costs for providing access service to the rural portions of its study area.” CLEC Access Order I, ¶ 64.

⁸⁵ See also the reference to the section 254(g) IXC rate averaging requirement in the CLEC Access Order I, ¶ 31.

⁸⁶ ILEC Access Order, ¶ 88.

⁸⁷ Friedlander at pp. 37-38.

incur the costs of bringing advanced services to these areas, but only on the assumption that their development costs can be recovered through appropriate region adjusted network access costs and, in the extremely rural areas, Universal Service Funding.

Administrative Simplification Does Not Justify Below Cost Benchmark Rate Caps

50. Finally, in several places CLEC Access Order I cites the administrative simplification afforded by a “bright line” standard as a reason for adopting incumbent benchmark rate caps. “It now appears that the best means of proceeding is to restructure and partially deregulate the environment in which CLECs provide access service, providing a bright-line rule that will facilitate effective enforcement.”⁸⁸ “[A] benchmark provides a bright line rule that permits a simple determination of whether a CLEC’s access rates are just and reasonable. Such a bright line approach is particularly desirable given the current legal and practical difficulties involved with comparing CLEC rates to any objective standard of ‘reasonableness.’”⁸⁹ In later applying this standard, the Commission took an even more strident approach in CLEC Access Order II.⁹⁰

51. While perhaps appropriate with respect to CLEC resellers in the larger markets, this is clearly a mistaken application of the Commission’s goals when applied to small BSP markets. The Commission itself has held that administrative simplicity by itself can be outbalanced by the problems created by cost averaging, for example.⁹¹ Moreover, administrative simplicity should not outweigh the serious problems caused by the imposition of a “bright line” standard on small community BSPs.⁹²

⁸⁸ CLEC Access Order I, ¶ 25.

⁸⁹ CLEC Access Order I, ¶ 41.

⁹⁰ “Both of TDS’s requests assume incorrectly that the Commission adopted a cost-based approach to competitive LEC access charges in its *CLEC Access Reform Order* [what we are calling CLEC Access Order I]. The Commission explicitly declined to apply this sort of regulation to competitive LECs and explained that it was applying a market-based approach. Consistent with this finding, the Commission held that it will assess the reasonableness of competitive LEC access rates by evaluating market factors rather than a particular carrier’s costs. The requests by TDS would involve an examination of carrier costs rather than market data to determine competitive LEC access rates. Because such an examination would be contrary to the Commission’s market-based approach to competitive LEC access charge, we must reject TDS’s requests.” CLEC Access Order II, ¶57. For a detailed discussion of the Order’s errors in using “market factors” instead of company specific cost studies (which are actually the *best* evidence of the cumulative impact of “market factors”), see Note 94, *infra*.

⁹¹ See the discussion beginning at Text ¶ 34, *supra*. The conflict between effective regulatory action and simplification is neither unusual nor limited to this situation. The priority decision is almost always present, and every decision to intervene is in some sense a compromise of the goal of administrative simplicity. See Breyer at p. 38. The question in this discussion is whether to adopt simplicity in light of the serious market distortions that are resulting in the BSP markets in general, and PrairieWave’s markets in particular. This would plainly seem to be a major mistake.

⁹² “Administrative simplicity should not trump forward looking economic cost evaluations where the disparity between actual BSP costs and administratively convenient incumbent rate caps is so wide, especially given the economic distortions taking place in the BSP marketplace as a direct result of this disparity...” Anderson at p. 30, ¶ 77.

52. With a focus on deregulation for the sake of retail market entry and competition, it is only natural to try to think of ways to minimize regulation of access rates. But as discussed above, the network access rate issue is itself an artificiality created by regulatory intervention to force mandatory network interconnection. It is a regulatory taking and cannot be resolved fairly except through rate setting mechanisms that relate closely to company specific actual market costs.⁹³ The truth is that the CLEC Access Orders were based on an almost complete lack of any factual record with respect to BSP operations or, for that matter, an appropriate analysis of the relevant market factors in small communities.⁹⁴ It is no wonder that the decisions have resulted in serious market distortions in rural community areas, a discussion to which we now turn.

⁹³ “The existence of joint costs...and regulation makes it impossible to answer the competition/regulatory question by simply analyzing market structure.” Breyer, *Regulation and Its Reform*, p. 287.

⁹⁴ One can well appreciate the Staff’s frustrations at the noticeable lack of CLEC cost data. *See for example* the language in CLEC Access Order II, ¶ 57. However, it seems that in the BSP markets at any rate, and especially in PrairieWave’s specific markets, the “market-based approach” and an evaluation of “market factors” as applied by the Commission clearly do not result in fair or just access rates nor do they support the Commission’s stated goals. In these circumstances, a cost based approach is the only fair and just approach, which is the underlying theme of this entire paper. It should also be noted that the Commission’s regulatory decisions, themselves, operate as powerful “market factors” and can radically change the complexion and characteristics of a market. *See Mitchell & Vogelsang* at p. 265. McNamara notes: “The structure of the industry—the number and size distribution of firms selling in the market, the conditions of entry and the degree of concentration of business among firms—is generally formed by the technical conditions of producing and marketing the industry’s products, by the characteristics of consumer demands *and by the legal and regulatory environment in which the industry operates. Regulatory policy, when it exists, shapes industry structure and behavior.* ...The existing [telecommunications] market structure evolved from a history of federal and state regulation, a series of court decisions, the AT&T divestiture agreement with the Justice Department and the Modified Final Judgment (MFJ)(sic) of Judge Harold Greene, and not from a national telecommunications plan or from a reaction to changing market conditions.” McNamara at pp. 57-58 (emphasis added). Gerald Brock makes a similar observation: “A change in policy induces an industry response, which may result in a new industry structure. A key theme of the empirical chapters of this study is the evolution of policy in response to changing industry structure while the industry structure is changing in response to earlier policy initiatives.” Brock at p. 36. So, also, does Stephan Breyer: “Moreover, [regulatory] intervention—or rearrangement of rights and liabilities—changes the distribution of wealth and income.” Breyer at p. 25. Kahn provides one of the few comprehensive lists of market factors: “The essential tasks of useful theory is precisely to identify the important institutional determinants of economic behavior—such as number of sellers, barriers to entry, complexity of product, shape and character of the production cost functions, *or the presence of regulation*—and to formulate hypotheses about their impacts on the various aspects of performance.” Kahn, Volume I, p. 18 [emphasis added]. These observations, of course, make the Commission’s reliance on “market factors” in the CLEC Access Orders without the consideration of its own involvement as one of those factors at best incomplete and at worst circular and illogical. One would therefore not be surprised to see the implementation of these decisions result in unintended market distortions, which is exactly what is occurring in the BSP markets. In the end, a “market analysis” leads directly back to a simple determination of the network owner’s true cost in the actual market. *See Bell & Singleton* at p. 4: “...prices ought to be set as they would be in a market, that is, *on the basis of the actual costs of the ...companies.* That encourages and rewards new entrants who can provide services by building their own lower cost facilities.” (Emphasis added.) Note that Bell and Singleton’s actual costs are the same as Kahn’s reference to a firm’s production cost function, and both point towards the need to consider the actual costs of each company, not some arbitrary nationwide average, in order to correctly understand any given market.

The Problems Caused by Below Cost Access Rates Are Substantial for BSPs

53. Using incumbent rates as BSP rate caps causes severe disadvantages for BSP network operators and significant market distortions. The unfair impact of the national benchmark access rates is dramatically highlighted by the discrepancy between these mandated rates and the rates supported by PrairieWave's own forward looking economic cost study. This kind of discrepancy has created numerous problems for BSPs like PrairieWave that are unfortunately having the effect of directly undermining the Commission's original goals for the rate setting process outlined above, especially its desire to see new broadband network development in rural areas.

Limitations on Cost Recovery Shifting in BSP Markets

54. What will happen if BSPs are not allowed to set network access rates based upon deaveraged, company specific forward-looking economic costs? The answer lies in a return to the Commission's opening observations about the interrelationships between interconnection costs, network access costs and local rates. As noted by party comments: "...retail local service rates...have been developed with the assumptions that incumbent LECs will receive access charge revenues."⁹⁵ This same reasoning applies to the facilities based rural BSP. Local rates will have to rise, as the Commission tacitly acknowledges in its rulings allowing for increases in Subscriber Line Charges ("SLC") to compensate for other reduced revenues.⁹⁶

55. This is where the CLEC Access Orders assumptions flatly clash with the reality of rural BSP operations. The mechanism of transferring network costs, even forward-looking economic costs, to local rates is not available to BSPs in competitive markets because local rate or SLC increases are not possible due to incumbent retail pricing competition. Like access rates, the large incumbent LECs are able to average lower and higher cost areas to recover costs from their local rates and Subscriber Line Charges. The competitive BSPs like PrairieWave are therefore not free to pass all of the reduced access revenue through to end-users.⁹⁷ BSPs are simply forced to absorb the costs, which lowers economic returns, discourages new investment and ultimately undercuts their competitive position.⁹⁸

⁹⁵ Local Competition Order, ¶ 979. This was certainly PrairieWave's assumption when it began its build outs in 1997 and since the Commission issued CLEC Access Order I in 2001, PrairieWave has been unable to financially justify entry into new rural markets. See Note 122 *infra*. Kahn expressly recognizes the need for regulatory pricing impacts to be reasonably foreseeable in order to be fair: "...and scheme of compensation is fair provided only that it was reasonably anticipated at the time of investment." Kahn, Volume I at p. 115. The Commission's 2001 CLEC Access Order I and its imposition on BSPs then in the act of committing investment dollars in new markets can only be seen as fundamentally unfair under this test as well.

⁹⁶ *Id.* at ¶ 984. See also this interplay described in the CLEC Access Order I, ¶¶ 28, 31. This type of cost recover shifting has occurred in the long distance industry, but only in the context of monopoly local incumbent operations. "The decline in long-distance telephone rates has been accompanied by a roughly corresponding increase in the basic monthly charge to subscribers." Kahn, Introduction to Volume I, p. xviii. Such shifting is impossible in competitive BSP markets.

⁹⁷ It is also worthwhile considering what a full revenue shift of below cost access rates might cause. PrairieWave estimates that the elimination of access revenue would require an increase of local service rates to about \$67.00 per month, an increase of almost four times existing local rates! This is a classic example of "rate shock," (See

56. The CLEC Access Orders unrealistically take the position that a BSP should be able to justify additional local service charges.

“...[A]dopting a benchmark for tariffed rates allows CLECs the flexibility to obtain additional revenues from alternative sources. They may obtain higher rates through negotiation. If a particular CLEC provides a superior quality of access service, or if it has a particularly desirable subscriber base, one or more IXCs may be willing to pay rates above the benchmark in order to receive that CLEC’s switched access service. Similarly, CLECs retain the flexibility to charge their end users higher rates for the access service to which they subscribe. Here again, if the CLEC provides a superior product, the end user likely will be willing to pay for it.”⁹⁹

57. While this may be true in certain limited circumstances where a large CLEC competes in large metropolitan areas, it is pure speculation when applied to small BSP markets and unsupported by anything in the record. In fact, such a scenario has not materialized. It cannot materialize because under the CLEC Access Order I, network access has become a uniformly priced commodity service with no distinguishing features that allow pricing variances. Worse, it is a direct contradiction of Order’s prior findings that the access market is not competitive. In fact, one of the reasons that the competitive access market has disappeared is the commodity nature of the service. There is no “higher quality of access” and therefore no economic basis to negotiate higher access rates. The imposition of incumbent rate caps as the default access charge option effectively undercuts any ability a BSP might have to negotiate more fair rates. The rules create the very unequal bargaining power that the Commission sought to avoid.¹⁰⁰

Kahn, Introduction to Volume I, p xxvi) and another clear example of the difference between high-density metropolitan area network costs and rural small community developments. And it is obviously impossible when heavily subsidized network access is allowed to its local service competitors who remain free to effectively avoid most network costs altogether.

⁹⁸ The filings made in the PrairieWave Petition vividly underscore this fact. In a January 24, 2005 *ex parte* letter to the FCC responding to late filed comments by Frontier Communications, PrairieWave noted that Frontier, as the incumbent LEC, was offering unbelievably low rates in markets where it competes against PrairieWave, ranging from \$9.08 per month to as low as \$2.59 per month. After noting the discriminatory and potentially predatory pricing implications of this cross-subsidization pricing policy, PrairieWave continued on pages 3-4: “Second, the Frontier behavior completely destroys the credibility and applicability of the Commission’s rationale that PrairieWave can recover its costs from its customer using charges other than access charges—the purported “backstop.” [See Text ¶ 56.] The Commission’s market analysis and backstop proposition work neither in theory nor in real life. PrairieWave has no ability to recover its legitimate access costs through access charges or through any other cost-recovery mechanism. Meanwhile, the incumbent recovers its access costs and buoyed by that cost recovery is able to significantly subsidize lowering its local rate to the point that a competitor like PrairieWave has no way to compete. ...The competitive situation in the Frontier exchanges makes the approval of access rates justified by the filed cost study even more imperative.”

⁹⁹ CLEC Access Order I, ¶ 43. A similar analysis is repeated in CLEC Access Order II at ¶ 58. But, again, it is based on an incomplete record in that no evidence or argument was presented that such cost recovery shifting was not possible.

¹⁰⁰ Unequal bargaining power is a very real problem for small rural BSPs in a number of contexts. See Text beginning at ¶ 82 and related Notes.

PrairieWave has found itself in precisely this situation in its negotiations with Qwest, MCI, Sprint and other large IXC's as well as with the numerous cellular carriers operating in its small community markets.¹⁰¹

58. Several additional points should be noted:

1. The general forward-looking economic access cost theory and the specific study submitted by PrairieWave do not contain the Common Carrier Line ("CCL") charge that in the past represented the access cost recovery element for fixed local costs. What we are examining here is the problem of recovery of market specific switching and other variable costs that are simply higher in rural BSP markets due to the demographic and topological factors discussed above. This makes the use of cost-averaged incumbent access rates as BSP price caps inappropriate. It also makes the assumption that some or all of these costs can be recovered from end-users theoretically unsound. It should therefore be no surprise that PrairieWave has also found it impossible in practice, at least in its BSP markets.
2. It is highly questionable that the incorporation of at least some form of CCL cost recovery really involves the subsidy of local services by long distance access rates claimed by the IXC's and cellular companies.¹⁰² This, of course, reflects the long running historical debate of what costs of local service are appropriate to allocate to long distance service, since it is unquestioned that the local loop is a necessary network element for long distance service as well as local calling services.¹⁰³
3. Because of the economics of rural telecommunications network construction, BSPs generally have not built out to the extremely remote areas and therefore do not cover

¹⁰¹ PrairieWave even has problems getting the major IXC's to pay intrastate tariffed rates that are supported by filed cost studies and subject to prior state commission hearings and approvals. And as will be discussed in detail below, the major cellular companies simply ignored the company's pleas for network compensation. See Note 173, *infra*.

¹⁰² "Although [the policy of federal and state regulators to support revenue transfers from long-distance to local telephone service] has been widely referred to as the local-service subsidy, the rate structure may nevertheless have been subsidy free. Trunk-call rates were substantially higher than marginal costs, but they not have exceeded the stand-alone costs of long-distance service." Mitchell & Vogelsang at p.252, fn. 1.

¹⁰³ Breyer makes the historically interesting point that prior to the Communications Act of 1934, "...commissions took the approach that was easier to administer. They assumed that telephones, local loops, and local exchanges were all installed to provide local service. They allocated these costs to local service and sought to recover all of them through local rates." Breyer at p. 296. This was later abandoned in favor of cost allocations as the Commission, now in existence, recognized that both long distance and local service depended on these same elements. *Id.* at pp. 291, 296-297. In this sense, the Commission's recent CLEC access rate decisions represent yet another swing in the pendulum back to burdening the local service subscriber. Breyer outlines a compelling argument based on the value of network externalities that suggests that the further shift to local service fees is economically and socially unsound. *Id.* at p. 295. He also makes the interesting observation that we should learn from our past mistakes: "...lessons from ...experience may be particularly useful as legislators seek to change existing systems and as administrators of new programs seek to avoid past mistakes," though he leaves it up to his readers to draw the line between the dots in telecom. *Id.* at Preface remarks.

entire Study Areas and are unable to qualify for Eligible Telecommunications Carrier (“ETC”) status. As a result, BSPs are not able to participate in the Universal Service Fund subsidies, which have been explicitly adjusted up for rural rate-of-return ILECs to compensate for other access rate changes.¹⁰⁴ That is, unlike their rural ILEC cousins, BSPs cannot shift a portion of their forward-looking economic access costs recovery to the USF fund or similar subsidy pool.¹⁰⁵

59. As a result of the interaction of these competitive and regulatory restrictions and contrary to the assumptions in the CLEC Access Orders, BSPs are not able to shift the recovery of their forward-looking economic access costs to other revenue sources.¹⁰⁶ The result is that BSP construction has all but ground to a halt. PrairieWave, for example, has not entered a new community market since the adoption of the incumbent access rate price caps in 2001, primarily due to lack of available funding given current revenue streams.¹⁰⁷ Further, it is

¹⁰⁴ See ILEC Access Order at ¶ 128.

¹⁰⁵ This is a fortunate result given the current financial instability of the USF pools. In any event, it is not economically efficient to use the USF pools to subsidize market specific direct forward-looking access costs. “...perhaps the most sufficient [problem] is the ICF’s plan to offset the loss of access revenues by increasing subsidies from the universal service fund (USF) of a similarly structured subsidy mechanism. *Such a scheme is risky for rural ILECs because many would have more than half their revenue dependent on subsidy mechanisms that could change drastically on the whim of regulators or lawmakers.*” Jackson at p. 12 [emphasis added].

¹⁰⁶ We are discussing here only the situation in BSP markets. It is possible (indeed, in light of the very different service costs, very likely) that these distortions do not exist to the same degree in larger metropolitan markets and especially in situations where CLECs use incumbent UNE elements or resale rates to offer services. Again, this makes the waiver procedure a potentially acceptable regulatory alternative rather than attempting to expand an arbitrary exemption like the Rural Exception.

¹⁰⁷ PrairieWave management has prepared several new market entry studies, all of which have been rejected by its board of directors, its shareholders, and its banks. The primary reason is that the potential rates of return, which are heavily influenced by potential access revenues, do not justify the additional risks, particularly the regulatory risks surrounding network access revenues. As a practical matter, PrairieWave has made its waiver request in large part because of these objections and in order to establish the proper access revenue rules for its BSP operations so that it can proceed with its planning and investment decisions. This is a very real world example of improper pricing signals resulting in inefficient capital allocation and investment decisions assuming, of course, that the waiver is granted. Without the waiver, the existing imposition of incumbent rate caps coupled with PrairieWave’s inability to shift its cost recovery to other services makes further BSP development uneconomical and therefore not financable. *The Commission needs to understand that each dollar of interstate access revenue that is lost comes directly out of the company’s net operating cash flow. The incumbent proxy caps in PrairieWave’s markets and PrairieWave’s actual costs are so disparate that this results in a reduction of cash flow of about 20% per year. That is a substantial difference in evaluating overall rates of return and by itself would likely change the company’s investment decisions and result in continued expansion into new BSP markets.* Breyer specifically acknowledges that industry regulators should be very sensitive to private industry rates of return and the impact that regulation might have on the ability to raise capital. Breyer at p. 19. Others agree: “Pricing policies and investment incentives for all parties, including the [network owners], must simultaneously be developed so as to create an efficient telecommunications system. Ideally, this means that prices of final goods and services, as well as of intermediate goods purchased by competitors, should reflect real economic costs. It also means that [network owners] should be afforded the reasonable opportunity they were promised to earn a fair return on their prudently made past investments, whose costs, having been found to be reasonable by regulators, are generally already in rates. Without the latter condition, network owners will be disadvantaged in obtaining capital, particularly as long as they remain regulated to at least some degree.” Duesterberg & Gordon at p. 40. “The FCC rules for interconnection have been criticized by some local-exchange carriers for pricing access to the

unlikely that PrairieWave would have expanded at all if it had known that its market specific access costs would be ignored in favor of arbitrary averaged incumbent access rates that are unrelated to (and far below) the costs in its markets.¹⁰⁸

60. At this point we should stop and refer back to the discussion of the constitutional and statutory requirements for just and reasonable compensation.¹⁰⁹ Recall that the test for constitutional just compensation was the ability of a company to provide an adequate return on capital, evidenced in part on its ability to raise additional capital.¹¹⁰ This is clearly not occurring for BSPs like PrairieWave, and the result is that the Commission's present network access rate limitations are just as clearly unconstitutional.¹¹¹

BSPs Are Forced to Cross-Subsidize of Incumbent and Competitor Operations

61. Unfairly low access rates based on incumbent benchmark rates instead of actual costs effectively subsidize the BSP competitors' access to its network, allowing the competitors to charge less for their local and long distance retail services.¹¹² This is a serious economic

system...so low that it becomes counterproductive for any competitor to try to build its own system. ...the FCC seems to want to require broad evidence of facilities-based competition at the local level before further deregulation, but, ironically, it delays such competition by unwittingly discouraging investment in it" Id. at pp. 78-79 [emphasis added]. Recall also that this is the prime indicator of an unconstitutional taking under the Fifth Amendment. See Text beginning at ¶ 15 and accompanying Notes, supra.

¹⁰⁸ See ¶ 39, *supra* for an analysis of the reasonableness of this assumption given the Commission's early decisions. See also Note 59 *supra* for a discussion of the rate disparities that result from not applying actual costs. "Such an outcome [not allowing actual costs to be recovered through interconnection access rates] clearly would be confiscatory and would devastate [network owner] incentives to invest in advanced infrastructure." Duesterberg & Gordon at p. 40. See also Kahn, Volume I at p. 53: "Any restriction on aggregate earnings, by threatening to cut off the opportunities for great success, will therefore have some immeasurable effect of discouraging...investments that otherwise would be made." This is no mere theoretical musing; this is precisely what is happening as PrairieWave reviews and rejects new market investment. Bell and Singleton express it this way: "...[N]ew entrants will shun markets where prices are held low." Bell & Singleton at p. 6. Precisely PrairieWave's dilemma with respect to artificially low network access rates. "...PrairieWave reasonably anticipated at the time of construction (1997-2000) it would be able to recover its forward-looking network access costs through the appropriate network specific access rates. Injured by the position taken by the Commission in the CLEC access orders, PrairieWave now cannot attract financing for a business plan allowing the expansion into additional rural markets." PrairieWave Reply Comments at p. 11.

¹⁰⁹ See Text beginning at ¶ 15 and accompanying Notes.

¹¹⁰ See Note 37, *supra*.

¹¹¹ A point explicitly made by PrairieWave: "The stark differences between the cost-based rates and the arbitrary benchmark rate could provide a basis for a constitutional takings claim as discussed in *Verizon v. FCC*, 535 U.S. 467, 122 S. Ct. 1646, 152 L. Ed. 2d 701 (2002). The FCC is now presented with the consequences of specific rate orders as applied to PrairieWave and at least the federal court's belief that the FCC would be 'more hospitable' to such claims especially where, as discussed in the attached monograph, the reduced rate jeopardizes the financial integrity of PrairieWave. *Id.*, at 523-8 (citations omitted)." PrairieWave Petition at p. 7, fn. 18.

¹¹² A BSP's network access service is what economists call an "intermediate good," meaning that it is a good or service that underlies the final retail service and forms part of its inherent cost structure. See Kahn, Volume I at p. 145. Retail pricing competition can be hugely distorted when intermediate goods are unfairly priced or

distortion of not only the competitive playing field, but also in the allocation of continued investment capital.¹¹³ BSP competitors use the subsidy provided by non-cost based low access rates to fund their own continued technology upgrades or to preserve their monopoly market shares through lower retail service rates. This has magnified the effect of stopping further development commitments by BSPs as the true impact of this competitive subsidy to the incumbent monopoly became apparent.¹¹⁴ Not only is this result anti-competitive, it actually creates a new barrier to entrance into new incumbent dominated markets and results in the very distortion of capital investment efficiency decisions that the Commission sought to remedy in adopting its rules.¹¹⁵ And in the ultimate perverse irony, it operates to the very benefit of the monopoly incumbents that were the target of the Act to begin with. Because it distorts the true

subsidized. Breyer has analyzed this very problem of cross subsidization inherent any time pricing is set below long run costs. Breyer at p.307. This leads directly to a form of economic market distortion known as the “inefficient substitution effect,” where customers, responding to the artificially low price signals, switch to the unfairly subsidized service. See Kahn, Volume I at p. 111. When the intermediate good is provided by a retail competitor in the same market, the result is a vicious circle of compounding economic distortions where the intermediate good supplier essentially subsidizes its own competition. This is exactly what is happening to rural BSPs: “[T]he artificially low incumbent access rate imposed by the Commission’s CLEC access orders unfairly subsidizes competitors like Qwest and the other IXC’s, allowing them and alternative local service providers, like cellular and VoIP companies, to keep an artificially low cap on competitive local service rates and related subscriber line fees. PrairieWave has no way to shift any of its costs, including its actual network costs, to other revenue streams.” PrairieWave Reply comments at p. 9.

¹¹³ “If [network owners] must price access to their local networks at rates that do not reflect even their real forward looking costs, including a reasonable profit, why invest just so competitors can use the fruits of investments at below-cost rates?” Tauke at p. 58. “In particular, if commissions set prices for interconnection that are too low to allow [network owners] an opportunity to recover all their reasonable costs of providing service, including a reasonable profit (as required by the Act), they will bias new entrants against themselves making new investments that might well be justified on efficiency grounds. It is hard to see how a systematic bias in this direction would contribute to the development of an advanced telecommunications infrastructure. ...Inappropriately low prices for interconnection used by competitors will also effect the revenues and profits of the [network owners]—directly through the lower prices, and indirectly through the artificial boost that those prices give their competitors.” Duesterberg & Gordon at p. 39. “Intermediate goods, such as unbundled elements of telecommunications facilities, resold services, and interconnection itself will be utilized efficiently only to the extent that their prices accurately reflect their costs.” *Id.* at p. 26.

¹¹⁴ PrairieWave is not the only small CLEC to raise this problem of frustrated expectations, though it is the only one to actually prepare a cost study proving the point. See CLEC Access Order II, fn. 78 and ¶ 23.

¹¹⁵ Posner, for one, has recognized the barrier to entry that unfair cost averaging which allows pricing below costs provides incumbent monopolists. See Posner at pp. 20, 85, 90. It is the obvious extension of the problem with distorting price signals that lead to inefficient capital allocation and incorrect investment decisions. McNamara states the problem as follows: “Not only will such a system of charges result in socially optimal consumption of telephone services and provide incentives for local exchange companies to make correct resource allocation decisions, *but potential competitors, presumably employing new technologies, will be provided the unbiased economic information necessary when making decisions about market entry.* ...Entry should not be encouraged, as it has been in the past when temporary economic opportunities were created by poor regulatory policies, unless such entry is on an economically sound basis.” McNamara at pp. 146, 168 (emphasis added). The problem, of course, is that the present situation sends the wrong signals to potential market entrants, like cellular and VoIP providers, causing them to enter markets with economically unsustainable business plans at price points that not only constrain network owner cost shifting, but force network owners to subsidize competitor operations. “Arbitrary [regulatory access rate] decisions will have—and have had—enormous consequences for efficiency in telecommunications markets, and frequently for the worse.” Duesterberg & Gordon at p. 27.

underlying costs, it is in the end, in the Commission's own words, "inherently unstable and unsustainable."¹¹⁶

62. The Commission has recognized this very problem in its analysis of small, rural rate of return LECs and found that using actual costs, instead of averaged costs (such as the averaging implicit in the use of incumbent access rates) reduced the cross-subsidization problem.¹¹⁷ It must now take steps to recognize that this very same problem must be addressed for rural BSPs if the Commission desires to see advanced broadband networks deployed in rural America.

Disparate Pricing Power Unfairly Favors BSP Competitors

63. Shifting revenue recovery to local rates or SLC charges is blocked by another asymmetry created by the CLEC access rules. The use of incumbent rates as price caps allows the larger incumbent to use its ability to average out its operating costs over a larger subscriber base often concentrated in denser, and therefore lower cost, areas. This puts the BSP at a competitive cost disadvantage that is directly reflected in its local service rates.¹¹⁸ As discussed above, the Commission acknowledged this problem in the CLEC Access Order I.¹¹⁹

64. The Commission also recognized the unique problems of competition against larger LECs in the ILEC Access Order:

"High per-minute charges may place [rate of return small ILECs] at a disadvantage in competing with new market entrants, including neighboring price cap carriers. In addition, higher rates and implicit subsidies may discourage efficient local and long distance competition in rural areas and limit consumer choice."¹²⁰

65. This is exactly PrairieWave's situation where it competes against Qwest and Frontier, both of which can average costs over much larger customer bases in large, metropolitan areas.¹²¹ It is in precisely these circumstances where the Commission has recognized that CLEC access costs could permissibly be higher than the incumbent, and rightly so.

¹¹⁶ "It is widely recognized that, because a competitive market drives prices to cost, a system of charges which includes non-cost based components is inherently unstable and unsustainable." Local Competition Order at ¶ 8.

¹¹⁷ "We conclude that granting rate-of-return carriers more flexibility to deaverage SLC rates will 'enhance the efficiency of the local telephone market by allowing prices to be tailored more easily and accurately to reflect costs and, therefore promotes competition in both urban and rural areas.' *Deaveraging has the added virtue of reducing implicit subsidies created by averaged rates.*" ILEC Access Order, ¶ 58 [emphasis added].

¹¹⁸ See Note 98, *supra*, for the real life example of Frontier pricing power in PrairieWave's competitive markets.

¹¹⁹ See Text ¶ 30, *supra*.

¹²⁰ ILEC Access Order, ¶ 6.

¹²¹ Again, this is no mere theoretical speculation, but a very real problem for BSPs in today's markets. See Note 96, *supra*.

Incumbent/BSP Rate Differentials and the Problem of Inefficient Market Entry

66. The CLEC Access Order I puzzles over why some CLECs charge higher access rates than others or than the incumbents in the same market. Because the Order chooses to side step the underlying network cost differences supported by the forward-looking economic cost theory, the Order improperly concludes that the higher rates have resulted in inefficient market entry:

“...[T]he historical ability of CLECs to tariff access rates well above the prevailing ILEC rate may have contributed to economically inefficient market entry by certain CLECs. We intend the declining benchmark scheme to wean competitive carriers off of their dependence on tariffed, supra-ILEC access rates without the disruption of a flash-cut to the prevailing market rate. We therefore think it important to ensure that this transitional mechanism serves that purpose, rather than presenting CLECs with the opportunity to enter additional markets in a potentially inefficient manner through reliance on tariffed access rates above those of the competing ILEC.”¹²²

67. This is perhaps the most confusing statement in the entire Order. It completely ignores the possibility that underlying economic costs could (and in fact do) explain the rate difference in BSP markets. It ignores the lack of competition in the access market (indeed, the complete lack of such a market) that makes the Order’s reliance on incumbent rates theoretically flawed. It also ignores the issues that make incumbent and CLEC access cost structures and rates “apples and oranges.” It is simply not true in BSP markets. It is the imposition of incumbent access rates as rate caps that is distorting the market and creating economically inefficient results including, among other things, in the form of a lack of competitive market entry because the incumbent rates are so much lower than actual forward-looking economic costs—the *very problem highlighted by the Commission in its original analysis of forward-looking economic costs in the Local Competition Order*:

“...[R]ates must be allowed to change to reflect actual cost...rather than systemwide average costs. *If prices are not allowed to adjust, then the entry that does occur is inefficient and ultimately destabilizing.*”¹²³ [Emphasis added.]

68. Ironically, the Commission has recognized this very problem of improper market entry signals in rural areas where network access rates do not take into consideration market specific costs:

“Reallocating costs rather than prescribing a single rate also will foster the development of efficient competition in the exchange access market. Rates that reflect an individual carrier’s cost of service provide the proper signals to permit

¹²² CLEC Access Order I, ¶ 58.

¹²³ Sharkey at p. 208.

a potential entrant to decide whether to enter a particular market. ...if a target rate were set too low, a barrier to competitive entry would be created.”¹²⁴

69. Commentators have also recognized the danger of improper market entry and cost signals that result from regulatory policies that work to “...eliminate profits lopsidedly and thereby create improper price signals.”¹²⁵ It is certainly not unfair to characterize the difference between incumbent access rate caps and PrairieWave’s actual network costs as decidedly “lopsided.”¹²⁶ So much so that without considering the very real cost differences of PrairieWave’s operations, the Order in effect operates as an economic taking of the BSP’s property without just compensation. As applied to PrairieWave and likely most other BSPs, the Order is unconstitutional.¹²⁷

70. What has happened in PrairieWave’s markets is that new technologies and decreasing technology costs have made it economically possible, even desirable, to overbuild small communities and provide advanced voice, video and data services, at least under the assumption that fair cost based access rates applied.¹²⁸ This is not a case of inefficient market entry, where new competition results in an increase in overall total costs of serving the market.¹²⁹ Rather this is a case of where the previously high fixed costs of market entry are rapidly decreasing, allowing even small markets to support competition by more than one firm.¹³⁰ And it is worth noting the additional benefits that PrairieWave and other BSPs play in pushing the rapid diffusion of new broadband technologies out to the rural areas.¹³¹

¹²⁴ ILEC Access Order, ¶ 84.

¹²⁵ Posner at p. 16.

¹²⁶ PrairieWave characterizes the difference as “staggering.” PrairieWave Petition at p. 7. See Note 59, *supra*, for the full quotation from the PrairieWave Petition.

¹²⁷ See Text beginning at ¶ 15 and accompanying Notes.

¹²⁸ “[A]n interdependence between technology and scale exists.” Sharkey at p. 191. “In the case of telecommunications, the preponderant factor has been the explosion of technology. It has obliterated the always-dubious technological basis for the previous impenetrable regulatory barriers between record and voice communications, satellite and terrestrial transmission, video and audio, and computers and computing, on the one side, and communications on the other: to take only the most dramatic example, the modern electronic telephone switch *is* a computer. It has also enormously increased the number and variety of potential suppliers of telecommunications services.” Kahn, Introduction to Volume I, p. xvii.

¹²⁹ See Sharkey at p. 9.

¹³⁰ *Id.* at pp. 19-20; Mitchell & Vogelsang at p. 253; and Breyer at pp. 287 293, 313. See also Posner at p 48. Posner has specifically recognized the role technological change is playing in opening up the possibilities for competition in telecommunications: “Communications is a contemporary example of an industry undergoing rapid technological changes that are apparently opening up a host of new competitive opportunities.” *Id.* at p. 106. He was almost prescient in his forecast of what would shortly occur in the BSP markets as a result of the 96 Act. See also the analysis of Mitchell and Vogelsang, which suggests that the technological diversity of the modern telecommunications networks allows different competitors to exploit different economics of scale at different volume levels. Mitchell & Vogelsang at p. 10. McNamara makes similar points: “The concept of the local telephone company as a natural monopoly...is breaking down as technology advances. Of course, once it becomes clear that local telephone companies are no longer natural monopolies, the case for permitting

71. However, the regulatory result is distorting what would otherwise be a favorable market entry signal because it violates the assumption made by PrairieWave (and also by other BSPs) that network access rates and revenues would be fair and reasonable, based on its specific rural

competition in basic local telephone services just as in the long distance market becomes strong.” McNamara at pp. 49-50. “[I]t is clear that the ongoing discovery of new technologies, products, production processes and business arrangements in response to the prospect of economic gain, and the introduction of these products, processes and business services at prices competitive with existing products, constitute the very essence of competitive behavior in that market. Technological advances and innovation are the driving competitive forces in modern telecommunications markets.” *Id.* at p. 62. “AT&T ...argued...that new entrants into its businesses would duplicate expensive existing facilities and that such duplication is costly and not in the public interest. This traditional natural monopoly argument...is false when the potential new entrant offers to serve a market currently ignored by the monopolist or when the potential entrant intends to use a new technology permitting the public to be served at a cost per unit of service as low as or lower than the monopolist’s cost, or when the new entrant, with its smaller management, is simply more efficient. In other words, the natural monopolist’s argument that competition results in needless duplication of facilities is based on the assumptions of unchanging technology. ...When innovative products and processes are available to a potential competitor and there is a likelihood that such a competitor can serve the public at least as efficiently as the original monopolist can while expanding the market, then there is no economic justification for denying entry to the new firm. ...The economies of scale of the newer telecommunications technologies are available at smaller service levels relative to the size of the market and, combined with the growth of markets, are much less likely to justify a monopolistic market structure.” *Id.* at pp. 71-72. “Beyond the attraction of exciting new technology and the promise of network convergence, the real power of next-generation network infrastructure is the bottom line: Next-generation infrastructure saves money...costs can be as little as one-tenth those of traditional architectures. ...The savings begin as the initial hardware is ordered because of the scalability of next-generation infrastructure. ...As evidence, startup service providers are going to venture capitalists and other funding sources with network plans that can be as little as half the cost of a traditional infrastructure, even including the additional burdens of staff training and new management systems. ...As impressive as up-front savings can be, gains over time are potentially much more significant. ...The economic advantages of next-generation architecture at this point appear to be significant, mostly for the startup service provider. ...*Next-generation networks also scale to a degree impossible with circuit-switched equipment, enabling operators to begin in small markets.*” Wolter at pp. 58-62 [emphasis added]. This is precisely what PrairieWave is doing with its proprietary network designs. “Delivering more than one form of content on a single network offers many efficiencies. Apart from the obvious business advantages of one-stop marketing and provisioning, data transport can often be provide very cheaply at the margin, as the secondary and much more flexible user of whatever extra bandwidth happens to be available.” Huber at p. 110. Kahn summarizes the general competitive situation in this fashion: “The competitive advantage may spring from simple differences in the efficiencies of firms in essentially similar industries, using essentially similar technology, or—as is may more likely and common in the public utility situation—differences in the respective technologies and cost structures, which have the effect of producing markedly lower long-run incremental cost for certain companies than for others.” Kahn, Volume I at p. 162. “[D]uplication is [not] necessarily inefficient, as long as the market has need of all these suppliers and none of them is too small to take full advantage of the available economies of scale.” Kahn, Volume II at p. 122. “[T]echnology is perpetually developing: so the natural monopoly of yesterday may no longer be natural today,” Kahn, Volume II at p. 10. “It has been the accelerated technological progress of recent decades that has brought these issues to the fore; and nowhere have they been more intense than in the field of communications. We have already alluded to the technological explosion in communications after World War II and discussed some of the numerous competitive issues that it has generated—most prominently the proper role of private microwave relay systems, of communications satellites and transoceanic cable, of community antenna television systems, and the proper pricing of communications services in these circumstances. In the presence of such rapid change, the natural monopoly of yesterday may be transformed into a natural arena of competition today...” Kahn, Volume II at p. 127.

¹³¹ For a summary of technological innovation and the benefits of more rapid diffusion through competition, see Posner at p. 43.

market cost structure.¹³² This is precisely the conclusion reached by the Commission with respect to small community rate-of-return ILECs.¹³³ The recent experience with the pricing of local service Unbundled Network Elements (UNE) underscores the impact of unfairly low access rates that act to reduce investment in new technologies.¹³⁴ This is not a mysterious or unknown phenomenon. It must be recognized and effectively addressed in order to get broadband deployment moving again in rural areas.

Access Rate Arbitrage and “Gaming the System” Unfairly Penalize BSPs

72. CLEC Access Order I concludes that “...the benchmark we adopt will ... provide critical stability for both the long distance and exchange access markets.”¹³⁵ In CLEC Access Order II, the Commission elaborated: “The Commission also sought to reduce existing regulatory arbitrage opportunities, spur efficient local competition, and avoid disrupting the development of competition in the local telecommunications market.”¹³⁶ In fact, particularly in the BSP areas, it is doing just the opposite.

73. The lack of fair access compensation allows PrairieWave’s incumbent and nonincumbent competitors (that today include cellular and VoIP service providers) who access its network to terminate calls with an unfair competitive advantage. They do not have to adjust their local service or long distance rates to the higher network costs of serving the area and, in fact, they actually have their retail rates subsidized by PrairieWave’s capped low access rates.¹³⁷ They

¹³² “...PrairieWave reasonably anticipated at the time of construction (1997-2000) it would be able to recover its forward-looking network access costs through the appropriate network specific access rates. Injured by the position taken by the Commission in the CLEC access orders, PrairieWave now cannot attract financing for a business plan allowing the expansion into additional rural markets.” PrairieWave Reply Comments at p. 11. *See also* Text ¶ 59 and accompanying Notes, *supra*, and Note 107, *supra*.

¹³³ “...[R]ate-of-return carriers ... will retain the flexibility to establish rates based on their own costs in the areas they serve, rather than being forced to conform to a prescribed target rate.” ILEC Access Order, ¶ 12. In general, PrairieWave believes that it is far more analytically fair to BSPs to be compared to small rate of return ILECs than large CLECs. “...[T]he Commission consistently has taken into consideration the differences between price cap and rate-of-return carriers, as well as the specific challenges faced by small local telephone companies serving rural and high-cost areas.” *Id.* at ¶ 134.

¹³⁴ “Bellsouth, SBC and Verizon—the three biggest local phone companies—insist FCC rules discourage them from making large investments because they are forced to lease their networks to competitors at government-mandated rates that fall well below their own costs. State regulators set wholesale rates based on a formula the biggest local phone companies claim is severely *flawed because it is not based on their actual costs*.” Long at p. 24 [emphasis added].

¹³⁵ CLEC Access Order I, ¶ 44.

¹³⁶ CLEC Access Order II, ¶ 74.

¹³⁷ “...[L]ow access rates are operating as a windfall for the IXC’s, including Qwest. They are profiting at PrairieWave’s expense, and unfairly so because of the impact of incumbent rate averaging on PrairieWave’s rate caps. While the financial impact to Sprint and Qwest may not be significant to them, the combined impact to PrairieWave from all 30+ IXC’s is significant to its operations, representing approximately 20% of its operating cash flow.” PrairieWave Reply Comments at p. 14.

are essentially implementing business plans that depend upon these subsidies, subsidies that are not sustainable. These companies use the regulatory arbitrage created by non-cost based interstate access rates to “game” the BSP access system and spur their own competitive price programs, which only further erodes the BSP’s ability to maintain its revenues and, consequently, its network and remain competitive.

74. Notice what is occurring in the BSP markets: Setting network access at rates that are far below the BSP’s forward-looking economic costs is forcing the BSP to either (1) absorb the missing revenue (thus sending inefficient and incorrect investment signals that result in discouraging competitive entry in additional small communities) or (2) cross-subsidize its own competitors by attempting to increase local access rates or SLC charges (an option that is actually nonexistent, as explained above). This also sends an erroneous investment signal, this time to the incumbent and other competitors using the BSP’s network at below forward looking economic costs. Worse, since these two signals are interdependent, they reinforce themselves, creating a capital investment inefficiency spiral that is dynamically unsustainable. It simultaneously destroys the BSP capital base that is supporting the dependency while encouraging BSP competitors to expand using business models based on faulty economic costs.

75. Moreover, this situation further distorts the determination of true operating and marginal costs for both the BSP and its competitors, which interferes with the setting of consumer rates. Is it really fair to BSP consumers to expect them to subsidize incumbents and other competitors because the BSP is forced to increase local rates to offset the loss of access revenue?¹³⁸ Does not the inability of a BSP to recover its network access cost restrict its ability to drive consumer prices down, an express goal of the Act? And when the BSP is no longer able to maintain its network due to a lack of adequate access revenue, how are its competitors going to replace that physical consumer connection? And is not the likely result a disruption of service, a violation of universal service goals, and an increase in consumer rates? Who is going to pay for the uncompensated taking of the BSP’s network? In short, the market mechanism that is supposed to produce true, competitive rates in real time is short circuited and inoperable, and the consequences are severe.

76. The resulting market entry signals, investment, and competitive pricing activities are inefficient and ultimately destabilizing, as has been vividly demonstrated over the past several years by the rapid rise and fall of the UNE based CLEC resellers. This is not a new industry phenomenon. This same inequity in access revenue worked to undermine the early independent telephone companies in the 1900s.¹³⁹ Today you can also see this start to occur in

¹³⁸ “[T]he existence of a subsidy introduces a distortion of its own because nonusers of a product [in this case, network access] are required to pay part of the cost for the users [the other carriers using the network to terminate their calls and data traffic].” See Sharkey at p. 49. See also the fairness issues raised in Mitchell & Vogelsang, at p. 33.

¹³⁹ “Although AT&T began to liberalize its connection policy, the toll revenues derived from interconnection were not divided equitably with the independents. Specifically, the formula for sharing toll revenues [which at that time included network access] did not recognize the vital contribution that local facilities made to the provision of long distance. As a result, the independents did not receive adequate compensation for the local facilities that

the new flat rate calling plans from fast growing, national substitute service competitors like the cellular service providers and, most recently, the new VoIP companies.¹⁴⁰ This is the direct result of the mandated use of “artificial” incumbent access rate caps as opposed to the application of true forward-looking economic cost concepts to access rate determinations.¹⁴¹

77. As discussed above, the Commission has recognized the dangers of pricing access below forward looking economic costs. Economists also support the theory that unfair cross-subsidization occurs when rates are set below relevant costs of production.¹⁴²

The Rural Exemption is Ineffective for Rural BSPs

78. The Commission’s current structural method of addressing these matters is through the so-called “rural exemption.” “We also adopt a rural exemption to our benchmark scheme, recognizing that a higher level of access charges is justified for certain CLECs serving truly rural areas.”¹⁴³

“We conclude that the record supports the creation of a rural exemption to permit rural CLECs competing with non-rural ILECs to charge access rates above those charged by the competing ILEC. First, we note that such a device is consistent with the Commission’s obligations, under section 254(d)(3) of the Act and section 706 of the 1996 Act, to encourage the deployment to rural areas of the infrastructure necessary to support advanced telecommunications services

initiated and terminated long distance calls in their territories. This made them less profitable than the Bell System companies and, ultimately, less appealing to investors.” Wilson at p. 17.

¹⁴⁰ The potential for Internet based services, which by FCC fiat entirely avoid access rate charges, to compete unfairly with network owners has long been recognized. “The Internet does not exist in isolation. It uses the same basic transport facilities and is potentially capable of offering the same services—including plain old telephony—as the heavily regulated, taxed, and subsidized telephone network. Arbitrage opportunities whereby Internet service providers can cherry pick traditional telecommunications customers, whose costs have been artificially inflated by universal service and access charge levies, will abound.” Frezza at p. 146. “The economics of the Internet is thus under strain, and the Internet’s unbridled growth, a source of both entrepreneurial pride and economic dynamism, is under question. No solution to the problem of additional investment is likely to be found unless or until the prices charged for Internet service reflect the costs of providing it.” Duesterberg & Gordon at p. 20.

¹⁴¹ The Interstate Commerce Commission created virtually identical rate distortion and capital flow problems in its early rate setting rules for interstate trucking. “...the inflexibility of the ICC may have intensified episodes of instability by preventing a rational restructuring of rates and the consequent flow of capital into the most productive sectors of the industry.” Sharkey at p. 27. This is exactly what is now occurring in PrairieWave’s small community markets because of the use of incumbent based access rate caps instead of actual costs.

¹⁴² See Sharkey at p. 42: “[T]he test for cross-subsidization reduces to the constraint that revenues must cover incremental costs of production.” Under the present incumbent rate caps, PrairieWave’s network access revenues do not cover its proper share of network operating costs, and this leads directly to the subsidization of competitors using its network to terminate calls or data traffic. See the PrairieWave cost study results summarized in Note 59, *supra*.

¹⁴³ CLEC Access Order I, ¶ 3.

and of the services themselves. The record indicates that CLECs often are more likely to deploy in rural areas the new facilities capable of supporting advanced calling features and advanced telecommunications services than are non-rural ILECs, which are more likely first to deploy such facilities in their more concentrated, urban markets. Given the role that CLECs appear likely to play in bringing the benefits of new technologies to rural areas, we are reluctant to limit unnecessarily their spread by restricting them to the access rates of non-rural ILECs.”¹⁴⁴

“We are persuaded by the CLEC comments indicating that they experience much higher costs, particularly loop costs, when serving a rural area with a diffuse customer base than they do when serving a more concentrated urban or suburban area. The CLECs argue that, lacking the lower-cost urban operations that non-rural ILECs can use to subsidize their rural operations, the CLECs should be permitted to charge more for access service, as do the small rural incumbents that charge the National Exchange Carrier Association (NECA) schedule rates. We note in this regard that a rural exemption will also create parity between the rural CLECs competing with NECA carriers and those competing with non-rural ILECs.”¹⁴⁵

“Our intent is that this exemption will permit a CLEC to tariff access rates above the competing ILEC’s only when the competing ILEC has broad-based operations that include concentrated, urban areas that allow it to subsidize its rural operations and therefore charge an artificially low rate for access to its rural customers. We conclude that the most effective and objective means of accomplishing this is to allow the rural exemption only to those CLECs that are competing with price-cap ILECs that do not qualify as “rural telephone companies” under the Act’s definition.”¹⁴⁶

79. This is precisely the situation that PrairieWave finds itself in, competing against Qwest and Frontier in its small community markets. However, while the Order recognizes the real problems faced by a BSP in a situation like PrairieWave finds itself, it defines the companies eligible for the rural exemption so narrowly that PrairieWave cannot qualify. The reason is that instead of looking at subscriber density factors, the true measure (and the ultimate cause) of higher network costs, it focuses on an arbitrary population limit of 50,000.¹⁴⁷ As a result, extraneous factors unrelated to actual network construction and operating costs can influence the application of the exemption. Such factors include growth and the annexation of previously built rural areas by larger communities and incidental BSP interconnection points of

¹⁴⁴ *Id.* at ¶ 65.

¹⁴⁵ *Id.* at ¶ 66.

¹⁴⁶ *Id.* at ¶ 79.

¹⁴⁷ See CLEC Access Order I, ¶¶ 75-76.

presence located in larger communities, all of which have played a part in PrairieWave's inability to qualify for the exemption.¹⁴⁸

80. Even for those BSPs that do qualify for the Rural Exemption, relief is partial at best. This is because the Rural Exemption simply allows the company to substitute the NECA (National Exchange Carrier Association) interstate billing rate instead of the incumbent benchmark rate. This is, in itself, just another (albeit higher) benchmark rate. Significantly, it ignores completely the fact that a NECA member is also entitled to a portion of the NECA IXC pool to meet its full interstate network access costs. The unfortunate BSP, however, is not allowed to receive this portion of the pool compensation, and therefore is structurally prevented from recovering its true network costs.¹⁴⁹

81. Therefore the Rural Exemption is theoretically flawed and provides an apparent remedy but no effective relief. It is also totally unnecessary if the Commission uses forward-looking economic access cost studies as the basis for all BSP access rates.

¹⁴⁸ PrairieWave's situation is highly instructive on this point: "PrairieWave serves 24 very rural communities ranging in population from a few hundred to just over 20,000 inhabitants." PrairieWave Petition at p. 3. "PrairieWave operates in the eastern half of a semi-circle area lying within a 90-mile radius from Sioux Falls, South Dakota (a small community with a population of approximately 124,000). By any reasonable definition, this is an isolated area, as even a cursory look at a map of the United States indicates. [Here PrairieWave inserts the following footnote 16: "The nearest metropolitan areas are Omaha, over 180 miles ("miles" means road miles, not airline miles) to the south, and Fargo/Moorhead, almost 250 miles to the north. The nearest major population centers are Minneapolis/St. Paul, Minnesota, 270 miles to the northeast and Des Moines, Iowa, about 285 miles to the southeast. The nearest major metropolitan area, other than Minneapolis/St. Paul is Chicago, more than 550 miles to the east. To the west there is virtually no major population center until Denver, Colorado, more than 620 miles away."]] PrairieWave's network configuration also attests to the rural nature of its operations. Its line density is approximately 6.67 lines per square mile of plant. By contrast, Qwest's average line density in south Dakota is approximately 17.59 lines per mile of plant while PrairieWave's ILEC affiliate has a line density of 5.89 lines per mile of plant. This is strong proof that PrairieWave's actual network costs and rates should be far closer to a small ILEC's rates than to Qwest's averaged interstate rate." PrairieWave Reply comments at pp. 5-6. Yet PrairieWave is unable to qualify for the Rural Exemption. Why? Because its corporate office (to which it provides its own telephone service) and portions of its network lie in areas that have been annexed by Sioux Falls. As a result, the company was forced to enter into an OVS License agreement with Sioux Falls to protect its cable plant investment. See PrairieWave Petition at pp. 4 and 9-10. Even MCI, a commenter in the PrairieWave Petition proceeding, "...agrees with PrairieWave that it is in the unique situation of providing service to a limited number of customers in Sioux Falls and that to apply the rural exemption limit of 50,000 inhabitant to this particular situation would be unjust." See PrairieWave Reply Comments at p. 6. This is a perfect example of the problems created by an arbitrary population limit rather than a line density factor or, even better, an actual cost study, which would automatically compensate for the blending of costs from combining a limited number of "large community" customers with an otherwise rural subscriber base.

¹⁴⁹ In PrairieWave's situation, under the NECA Rural Exemption rate, it would be allowed to bill \$0.026611 per interstate MOU (Minute of Use) while its forward looking cost study supports a rate of \$.050879 per MOU, almost twice the Rural Exemption amount. By contrast, "the composite rate for the incumbent Qwest for all elements is \$0.0066, which is the rate PrairieWave was obliged to charge effective June 24, 2004 pursuant to CLEC Order I and as codified in 47 C.F.R. § 61.26(c)." See the PrairieWave Petition at pp. 6-7 and the PrairieWave Reply Comments at p. 14. The difference is substantial, representing several million dollars per year in lost access revenue and operating cash flow, effectively preventing PrairieWave from raising additional capital to enter new markets. See Note 107, *supra*.

Part III: Negotiated Interconnection Access Agreements are Ineffective in BSP Markets

The Problem of Unequal Bargaining Power

82. If actual access markets do not exist to set BSP access rates, it is nevertheless possible to use market-like mechanisms to attempt to establish these rates. The use of bilateral negotiated agreements between BSPs and those using their networks is one example. However, negotiated agreements presume equal bargaining power,¹⁵⁰ and as we have seen, when it comes to interconnection, the new market competitor has none.¹⁵¹

83. In fact, the Commission has specifically rejected the reliance on individual negotiated agreements as a preferred method in setting just compensation due to unequal bargaining power. In the context of the section 251 interconnection rules, it noted that the existing RBOCs enjoyed unequal bargaining power, especially with smaller companies and new market entrants.¹⁵²

84. As noted earlier, in the context of CLEC access rates, it noted that some CLECs had used the tariff process to “...impose excessive access charges on IXC and their customers...” by setting “...access rates that were subject neither to negotiation nor to regulation designed to ensure their reasonableness. These CLECs have then relied on their tariff to demand payment from IXC for access services that the long distance carriers likely would have declined to purchase at the tariffed rate.”¹⁵³

85. The Commission also noted that interconnecting “...carriers may have incentives to make unreasonable demands or otherwise fail to act in good faith”¹⁵⁴ and found that this is exactly what was occurring in the CLEC access area where IXCs were arbitrarily changing CLEC access bills or simply refusing to pay.¹⁵⁵ Given these competing and often conflicting goals,

¹⁵⁰ “The assumption that the ‘best’ or most efficient allocation of resources is achieved by free-market forces rests upon an assumption that there is a ‘proper’ allocation of bargaining power among the parties affected. Where the existing division of such bargaining power is ‘unequal,’ it may be thought that regulation is justified in order to achieve a better balance.” Breyer at p. 32.

¹⁵¹ See text at ¶ 13 and accompanying notes, *supra*.

¹⁵² “... [T]he requirements in section 251 obligate incumbent LECs to provide interconnection to competitors that seek to reduce the incumbent’s subscribership and weaken the incumbent’s dominant position in the market. Generally, the new entrant has little to offer the incumbent. Thus an incumbent LEC is likely to have scant, if any economic incentive to reach agreement.” Local Competition Order at ¶ 141. See also *Id.* at ¶¶ 55, 241, and 245.

¹⁵³ CLEC Access Order I, ¶ 2.

¹⁵⁴ Local Competition Order, ¶ 141.

¹⁵⁵ CLEC Access Order I, ¶ 23. PrairieWave still has significant problems with large IXCs refusing to pay legitimate access charges. How can a small BSP bargain with a huge company that simply refuses to pay its bill? There is no fast remedy other than costly and time-consuming regulatory proceedings and litigation for tariff violations, a situation where the Commission has a long history of unsuccessfully wrangling with the large RBOCs and IXCs, including AT&T. The Commission itself has recognized (and then proceeded to ignore) this problem in the rural access payment environment: “We are concerned that the IXCs appear routinely to be

the Commission concluded that voluntary agreements are not per se invalid, but that additional rules are necessary in order to encourage fair negotiations and arrangements.¹⁵⁶

Wireless in Wonderland: BSPs in a Position of Unequal Bargaining Power

86. Commercial Mobile Radio Service providers (or, as we now know them, cellular service companies) were given special treatment in the Local Competition Order, primarily because of complaints by the cellular companies that they did not have the bargaining power to negotiate fair network interconnection and access agreements with the RBOCs and large IXC's, making the cellular access problem a special case of the impact of unequal bargaining power on negotiated access rates.¹⁵⁷ The self-serving nature of these claims should have triggered a more in depth exploration by the Commission as to their veracity, at which point the Commission would have discovered that cellular growth was proceeding rapidly without any special Commission access orders,¹⁵⁸ largely because many of the cellular companies were, in fact, owned by the large RBOCs and IXC's.¹⁵⁹ Of course, there was never any showing that

flouting their obligations under the tariff system. Additionally, the IXC's' attempt to bring pressure to bear on CLEC's has resulted in litigation both before the Commission and in the courts. And finally, the uncertainty of litigation has created substantial financial uncertainty for parties on both sides of the dispute. This uncertainty, in turn, poses a significant threat to the continued development of local-service competition, and it may dampen CLEC innovation and the development of new product offerings." CLEC Access Order I, ¶ 23. The real remedy, denial of network access, is foreclosed by the mandatory interconnection rules. This situation requires continued Commission regulation in the form of access rate determinations, at least in the rural BSP markets. See Text ¶ 15 and accompanying Note, *supra*.

¹⁵⁶ Local Competition Order, ¶ 56; CLEC Access Order I, ¶¶ 4, 40. PrairieWave believes that its experiences (described in detail below) prove that the huge size and economic power of the various players that access its networks make negotiated agreements totally unworkable for rural BSPs. The only effective solution is a return to tariffed rates based on company specific costs, at least for the rural BSPs.

¹⁵⁷ "Many CMRS providers contend that they are unable to negotiate interconnection arrangements based on mutual or reciprocal compensation because of incumbent LEC bargaining power." Local Competition Order at ¶ 1080. "...LECs have used their unequal bargaining positions to impose asymmetrical rates for CMRS providers and, in some instances, have charged CMRS providers origination as well as termination charges." *Id.* at ¶ 1087.

¹⁵⁸ According to the CTIA—The Wireless Association's annual surveys, from January 1 1986 through December 31, 1995, cellular subscribers jumped 9,831% to 33.8 million. For the three year period from 1993 through 1995, subscribers jumped by 22.8 million, an increase of 2,062%. During that same three-year period, the cumulative industry capital investment doubled from \$11.2 billion to \$24.1 billion. In 1996, the year of the Local Competition Order, the number of subscribers increased by 10.2 million, *the largest increase in the industry's history to date*. See CTIA Annualized Wireless Industry Survey Results. This is not an industry that needed special interconnection treatment in rural BSP markets. Moreover, given that most of this growth was in large metropolitan areas, it makes a shambles of the Commission's "finding" that most calls were local, at least as applied to BSP markets. See Note 166, *infra*. The truth is that most wireless calls in BSP markets are true long distance calls that originate in large markets and terminate over the BSP networks at unjustly low rates.

¹⁵⁹ Verizon Wireless, Sprint, Qwest Wireless, and AT&T Wireless being four prime examples operating in PrairieWave's markets at the time. Today, the concentration of wireless carriers in the hands of large incumbent ILECs has continued with the merger of Nextel and Sprint and the acquisition of Western Wireless by ALLTEL. See Cusick and Choe at p. 5. "...[T]he top four [wireless] carriers currently control (including affiliates) around 84% of the market." Shvets, Coe & Kieley at p. 8. "The top three wireless providers in any geographic market generally serve 80% of the area and have a scale and scope advantage." Horan *et. al.* at p. 3. How these giants lack bargaining power with rural market BSPs is beyond understanding, either in 1996 or today.

unequal bargaining power existed in favor of BSPs or, for that matter, ILECs, in small rural markets and, in fact, the much larger size of the cellular carriers resulted in the exact opposite effect where the cellular companies used their bargaining clout buttressed by the Commission's own special wireless access orders to force BSPs into highly unfavorable interconnection agreements.¹⁶⁰

87. Nevertheless, based on the alleged inadequacies of negotiated agreements, the Commission ordered all LECs, including small rural ILECs and BSPs, to interconnect with all requesting cellular companies,¹⁶¹ but on very special terms. In spite of its insistence on being technology neutral,¹⁶² the Commission violated its own neutrality goals and ordered mandatory interconnection for all wireless carriers under what is known as reciprocal compensation agreements.¹⁶³ Failing the ability of the parties to negotiate mutually satisfactory reciprocal compensation arrangements, BSPs were simply forced to terminate all cellular traffic with no compensation.¹⁶⁴

88. Reciprocal compensation agreements are very special types of interconnection agreements. They essentially call for each party to pay the same rate to each other for exchanged traffic. This is obviously unfair when the underlying costs are not equivalent, which is exactly the case in BSP markets due to the relatively high cost of BSP networks and the poor coverage of cellular service in these areas (which drastically lowers the cost of wireless network operations). This is especially true when the BSP is asked to terminate minutes that originate in low cost metropolitan areas. In essence, the Commission once again ignored the network

¹⁶⁰ See Note 175, *infra*.

¹⁶¹ “The Commission finds that telecommunications carriers may request interconnection under section 251(c)(2) to provide telephone exchange or exchange access service, or both. If the request is for such purpose, the incumbent LEC must provide interconnection in accordance with section 251(c)(2) and the Commission's rules thereunder to any telecommunications carrier, including interexchange carriers *and commercial mobile radio service (CMRS) providers*.” Local Competition Order at ¶ 26 [emphasis added]. “Sections 251, 252, 332 and 201 are designed to achieve the common goal of establishing interconnection and ensuring interconnection on terms and conditions that are just, reasonable, and fair. It is consistent with the broad authority of these provisions to hold that we may apply sections 251 and 252 to LEC-CMRS interconnection.” *Id.* at ¶1023. “Incumbent LECs must accordingly make interconnection available to these CMRS providers in conformity with the terms of sections 251(c) and 2523, including offering rates, terms, and conditions that are just, reasonable and nondiscriminatory.” *Id.* at ¶1012.

¹⁶² See Text at ¶ 6 and accompanying Notes, *supra*.

¹⁶³ “The Commission concludes that LECs are obligated, pursuant to section 251(b)(5) and the corresponding pricing standards of section 252 (d)(2) to enter into reciprocal compensation arrangements with CMRS providers, including paging providers, for the transport and termination of traffic on each other's networks.” Local Competition Order at ¶ 34. “All CMRS providers offer telecommunications. Accordingly, LECs are obligated, pursuant to section 251(b)(5) (and the corresponding pricing standards of section 252(d)(2)), to enter into reciprocal compensation arrangements with all CMRS providers, including paging providers, for the transport and termination of traffic on each other's networks, pursuant to the rules covering reciprocal compensation set forth in Section XI.B, below.” *Id.* at ¶ 1008.

¹⁶⁴ See Note 173, *infra*.

cost differences in small rural markets just as it did in the CLEC Access Orders, and planted the seeds for further distortion of the BSP markets. The BSP provides exactly the same service as in terminating any other minute, yet the rates are drastically reduced for the cellular carrier, another economic efficiency distortion specifically applicable to cellular competitive service and a violation of the Commission's own nondiscrimination rules as well.¹⁶⁵

89. But the Commission did not stop there. It went on to find a presumption that cellular minutes are largely local in nature, and not subject to access rates at all. It did this in a three-step fashion. First, it created a special rule defining local calls for cellular purposes as any call originating and terminating in a cellular MTA, a massively expansive definition of the normal local call definition.¹⁶⁶ It backstopped this finding by holding that state commissions had no authority over wireless operations and that their normal local/long distance definitions do not apply.¹⁶⁷ In its second step, it then bootstrapped its "finding" of the local nature of cellular calls into a finding that reciprocal compensation arrangements were the preferred and "legal"

¹⁶⁵ See Text ¶ 97 and accompanying Notes, *infra*.

¹⁶⁶ "On the other hand, in light of the Commission's exclusive authority to define the authorized license areas of wireless carriers, we will define the local service area for calls to or from a CMRS network for the purposes of applying reciprocal compensation obligations under section 251(b)(5). ...Because wireless licensed territories are federally authorized, and vary in size, we conclude that the largest FCC-authorized wireless license territory (i.e., MTA) service as the most appropriate definition for local service area for CMRS traffic for purposes of reciprocal compensation under section 251(b)(5) as it avoids creating artificial distinctions between CMRS providers. Accordingly, traffic to or from a CMRS network that originates and terminates within the same MTA is subject to transport and termination rates under section 251(b)(5), rather than interstate and intrastate access charges." Local Competition Order at ¶ 1036. This finding is in direct opposition to the Commission's own regulatory and technology neutrality objectives (See Text at ¶ 6 and accompanying Notes), favoring the large established cellular operators at the expense of small market BSPs, and cellular technology at the expense of wireline competitors. It is important to realize just how huge the MTAs are, especially in relation to BSP markets. In March 1995, the Commission arbitrarily divided up the country into 51 geographic Metropolitan Trading Areas, or "MTAs." See Cusick & Choe at p. 39. *The MTA that encompasses PrairieWave's markets includes all of Minnesota, North Dakota, South Dakota and parts of Wisconsin, Iowa, Montana and Wyoming.* The effect of the Commission's decision is thus to convert substantially all of what would normally be long distance calls subject to interstate and intrastate access rates to local calls. Put into practical prairie terms, a regulatory policy that treats a wireless call from northern Wisconsin to Lead, a small PrairieWave community in the northern Black Hills of western South Dakota, as a "local call" simply defies common sense.

¹⁶⁷ "We note that Section 332 generally precludes states from rate and entry regulation of CMRS providers, and thus, differentiates CMRS providers from other carriers." Local Competition Order at ¶ 1025. "*With the exception of traffic to or from a CMRS network*, state commissions have the authority to determine what geographic areas should be considered 'local areas' for the purpose of applying reciprocal compensation..." *Id.* at ¶ 1035 [emphasis added]. "We will not permit entry regulation through the exercise of states' sections 251.252 authority or otherwise. In this regard, we note that states may not impose on CMRS carriers rate and entry regulation as a precondition to participation in interconnection agreements that may be negotiated and arbitrated pursuant to sections 251 and 252." *Id.* at ¶ 1026. The result is a direct violation of the Commission's own nondiscrimination standards (See Note 188, *infra*) since it removes cellular carriers from intrastate access rates set by the state agencies. This also substantially decreases BSP intrastate access revenue, yet another basis for finding the current regulatory scheme unconstitutional. See Text beginning at ¶ 15 and accompanying Notes, *supra*. But far worse, it arbitrarily tosses aside over 100 years of local/long distance market definitions made by the various states based on historical exchange development, Extended Area Service ("EAS") calling patterns, and existing geographical and economic communities of interest.

method for cellular access rates.¹⁶⁸ Finally, it made a specific finding that cellular traffic, based on the first two steps, was mostly local traffic, not subject to access rates at all.¹⁶⁹

90. Most recently, the Commission and the various states, eager to encourage the spread of cellular into rural areas, have liberalized the rules for allowing cellular carriers to obtain Eligible Telecommunications Carrier status, allowing them to access Universal Service Funds *without first providing complete coverage at minimum service levels*.¹⁷⁰ Once again regulatory policy favors the cellular technology at the expense of BSPs, which up to recently have had to

¹⁶⁸ “We conclude, however, as a legal matter, that transport and termination of local traffic are different services than access service for long distance telecommunications. Transport and termination of local traffic for purposes of reciprocal compensation are governed by sections 251(b)(5) and 252(d)(2), while access charges for interstate long distance traffic are governed by sections 201 and 202 of the Act. The Act preserves the legal distinction between charges for transport and termination of local traffic and interstate and intrastate charges for terminating long distance traffic.” Local Competition Order at ¶ 1033. “[R]eciprocal compensation for transport and termination of calls is intended for a situation in which two carriers collaborate to complete a local call. ...We find that the reciprocal compensation provisions of section 251(b)(5) for transport and termination of traffic do not apply to the transport or termination of interstate or intrastate interexchange traffic.” *Id.* at ¶ 1034. While perhaps technically correct as far as it goes, when coupled with the Commission’s MTA finding, the result is devastating for BSPs in their small rural markets. This is nothing but regulatory fiat, defining local calls in such and unusual way as to completely erode any rational distinction between local and long distance calling. *See* Note 167, *supra*.

¹⁶⁹ “[T]raffic between an incumbent LEC and a CMRS network that originates and terminate within the same MTA (defined based on the parties’ locations at the beginning of the call) is subject to transport and termination rates under section 251(b)(5), rather than interstate or intrastate access charges. ...*most traffic between LECs and CMRS providers is not subject to interstate access charges unless it is carried by an IXC...*” Local Competition Order at ¶ 1043 [emphasis added]. This is a perfect example of the logical fallacy of tautological reasoning, since the Commission had previously defined the market area for local calling as the MTA, which covers a huge geographic region compared to PrairieWave’s markets and by its very size resulted in converting most of what had normally been long distance minutes into local calls. *See* Note 166, *supra*. The resulting dodge of normal network access costs unfairly distorts the cellular business model, causes inefficient market entry by the cellular companies, distorts consumer buying patterns, unjustly (and unconstitutionally) forces the BSP to terminate cellular minutes at rates far below their actual costs and simultaneously prevents the BSPs from shifting cost recovery because of the low cellular retail rates. *See* Text beginning at ¶ 53 and accompanying Notes. It is a vicious circle of forced subsidization by the BSP of an inherently inefficient cellular business model, at least in rural communities. “Wireless is cannibalizing access lines much more quickly and to a greater extent than anticipated—per minute pricing for wireless is now below wireline’s and declining 25% per year.” Horan et. al. at p. 9. And this subsidization is set to escalate: “Wireless pricing is set to drop below wireline and be half the price within four years, increasing the rate at which consumers displace wireline in favor of wireless.” Horan et. al. at p. 8. Put another way, cross subsidization of wireless access by BSPs is setting the BSP up for yet further decreases in retail rates as consumers, lulled by the inherent economic distortions of the Commission’s network regulatory policy in this area, wrongly select the subsidized wireless service. It is not hard to see that this cannot be sustained indefinitely. *See* Text at ¶ 75 and accompanying Notes, *supra*.

¹⁷⁰ *See* Cusick & Choe at p. 54. The further subsidization of rural cellular development has escalated quickly in recent years. “The sum received by wireless providers soared to about \$230 million last year [2004], from \$2.6 million in 2000.” Davidson at p. 3B. “ETC status is now being granted on the promise of Study Area coverage. Historically, ETC status has been reserved for only those who are already prepared, and in fact offer, the required services. Notice the huge swing in fairness here. The cellular companies can use USF funds to actually build out their coverage, while wire line companies have had to fund the facilities up front and then apply for ETC status.” October 18, 2004 email from the author to Richelle Elberg, Director-Wireless Markets, JSI Capital Advisors.

first make the investment to provide ubiquitous service throughout a Study Area prior to qualifying for USF funding.¹⁷¹

91. There are several problems with the Commission's analysis in general and as applied to BSP markets in particular:

92. First, the presumption of local calling, the requirement of mandatory interconnection based on reciprocal compensation, and the requirement of free traffic termination in the absence of such agreements gave the cellular companies huge bargaining leverage over the LECs, especially the small rural ILECs and BSPs.¹⁷² In many instances, the cellular companies simply refused to bargain with BSPs, forcing BSPs to terminate their traffic with no compensation.¹⁷³

¹⁷¹ An obvious violation of the Commission's own neutrality principles as well as putting a substantial additional strain on USF funding in general. "No wonder USF funding, contributions and pool participation is swinging out of balance. This new liberalized interpretation of ETC status is granting access to USF funds without meeting the historical conditions. This unfairly allows the cellular companies to build out using pool funds instead of putting up the capital first, building the ability to offer coverage, and then gaining ETC status. ...These new steps in the ETC process combine with the access problems ...to worsen an already bad situation. Using governmental policy in this manner encourages inefficient capital allocation and investment, another contradiction of the FCC's First Report and Order in the TRA96 proceedings. The lobbying effort of the cellular companies is enormous, and has turned this from the implementation of proper economic policy into pure power politics. And the RLECs pay by (1) suffering uneconomic access rates, (2) losing customers to the resulting low price retail cellular service (which launches the whole sub base erosion spiral), and now (3) by funding the USF pool only to see disbursements go out to cellular companies that have parsed the Study Areas to their advantage and are receiving advance funds with no practical way of enforcing that the build outs will, in fact, occur." October 18, 2004 email from the author to Richelle Elberg, Director-Wireless Markets, JSI Capital Advisors.

¹⁷² "The cellular companies abused their new found bargaining leverage to negotiate down RLEC access rates. RLEC recourse was only through expensive and time consuming state and/or FCC proceedings. As a result, for several years nothing was paid by the cellular carriers, even though valid bills were rendered. Today, we have to live with access rates that are less than 10% of our TELRIC cost study rates. (and this is technology neutral?) This is also arguably a direct violation of the nondiscrimination requirements, but no RLEC has enough money or time to litigate it." October 17, 2004 email from the author to Richelle Elberg, Director-Wireless Markets, JSI Capital Advisors.

¹⁷³ This is exactly what happened to PrairieWave. *From 1996, the date of the Local Competition Order, until 2003, PrairieWave was unable to recover any compensation for terminating wireless minutes.* A June 19, 2003 letter from Qwest Wireless to PrairieWave sets forth the typical arrogance of the wireless companies under the Local Competition Order's special provisions: "Qwest Wireless has received PrairieWave Telephone Company's statement(s) for access/termination charges in connection with PrairieWave Telephone Company's termination of traffic originated by Qwest Wireless' subscribers. ...Qwest Wireless will not pay PrairieWave Telephone Company's charges. ...Since 1996, the Act has set the framework governing reciprocal compensation for carriers exchanging local telecommunications traffic. Under Section 252 of the Act, reciprocal compensation obligations exist only under an interconnection agreement negotiated between the parties, to provide for mutual and reciprocal recovery by each carrier of costs associated with the transport and termination of each carrier's network of the calls that originate on the network facilities of the other carrier. Qwest has no legal duty to pay the charges set forth in your statement(s). Qwest Wireless has never entered into any contract with PrairieWave Telephone Company and has not otherwise agreed to pay PrairieWave Telephone Company's charges such as those in the statement(s). *In the absence of an interconnection agreement negotiated under the Act, the exchange of traffic between Qwest Wireless and PrairieWave Telephone Company is a de facto bill-and-keep arrangement.* ...Until such time as an agreement is negotiated, however, the existing bill-and-keep system is the appropriate compensation method." [Emphasis added.] A better example of the unequal bargaining power between Qwest, one of the original RBOCs, and the small BSPs cannot be found. It took PrairieWave almost two more years to

It took years for PrairieWave to negotiate reciprocal compensation agreements.¹⁷⁴ Even when negotiations have taken place, these presumptions have resulted in lopsided agreements with unrealistically low network access rates.¹⁷⁵

93. Second, by imposing a mismatch of the cellular MTA boundaries with BSP market boundaries, the Commission recreated in the wireless area the very same problem with the

negotiate a agreement with Qwest Wireless (the agreement was signed on December 18, 2003, and was approved by the South Dakota PUC on January 28, 2004 and by the Minnesota PUC on February 18, 2004). For over 7 years, Qwest (and the other wireless carriers—*See* Note 174, *infra.*) was able to terminate wireless traffic on PrairieWave's network without paying any compensation to PrairieWave, a direct result of mandatory interconnection and resulting in the unconstitutional taking of PrairieWave's network without just compensation.

¹⁷⁴ Here, in brief, is PrairieWave's experience with wireless reciprocal compensation negotiations: T Mobile USA signed August 24, 2004 and accepted by the Minnesota PUC on September 30, 2004 (T Mobile has refused to enter into an agreement for South Dakota and Iowa); Sprint Spectrum L.P. signed August 11, 2003 and accepted by the Minnesota PUC on September 22, 2003 (Sprint has refused to enter into an agreement for South Dakota and Iowa); Great Lakes of Iowa signed January 7, 2005 and accepted by the Iowa Utilities board on February 23, 2005 (no agreements are required in South Dakota or Minnesota); AT&T Wireless Service, Inc. signed October 7, 2004 and accepted by the Minnesota PUC on November 1, 2004 (AT&T has refused to enter into agreements for South Dakota and Iowa); Rural Cellular Corp., signed April 4, 2003 and accepted by the Minnesota PUC on May 19, 2003 and by the South Dakota PUC on June 10, 2003 (no agreement is required for Iowa); MidWest Wireless Communications, LLC Minnesota agreement signed July 29, 2003 and accepted by the Minnesota PUC on September 19, 2003, South Dakota agreement signed July 25, 2003 and accepted by the South Dakota PUC on September 23, 2003, and Iowa agreement signed May 3, 2005 and accepted by the Iowa Utilities Board on May 9, 2005; Wireless Alliance LLC signed April 4, 2003 and accepted by the South Dakota PUC on June 10, 2003 and by the Minnesota PUC on May 19, 2003 (no Iowa agreement is required); Western Wireless corporation signed June 17, 2003 and accepted by the South Dakota and Minnesota PUC on July 18, 2003 and by the Iowa Utilities Board on July 23, 2003; and Verizon Wireless Inc. signed January 20, 2003 and accepted by the Minnesota PUC on February 14, 2003, by the South Dakota and on March 7, 2003 and by the Iowa Utilities Board on March 10, 2003. The intransigence of the wireless carriers in PrairieWave's markets is, unfortunately, not unique to PrairieWave, but fairly typical of what most rural BSPs have experienced *and is a direct result of the unequal bargaining power created by the Commission in the Local Compensation Order.*

¹⁷⁵ The average terminating rate for PrairieWave wireless long distance access minutes under its existing reciprocal compensation agreements is \$0.0005 per MOU. This compares to the FLEC study interstate rate of approximately \$0.054 and state approved intrastate rates of approximately \$0.069 in South Dakota, \$0.059 in Minnesota, and \$0.085 in Iowa. These rate disparities are huge, and the resulting lost revenue to PrairieWave is significant. Moreover, it is this type of disparity that directly contributes to the market and competitive distortions discussed above. See Text beginning at ¶ 53 and accompanying Notes. It is very interesting to note here *that in the markets served by Sprint affiliates, the interaffiliate access rate is \$0.058 per MOU.* See Cusick & Choe at p. 23. It is a little bit more than mere coincidence that this almost mirrors PrairieWave's cost based access study rates, and certainly highlights the unjust disparities in network access rates created by the present cellular companies' bargaining positions in small BSP markets. Because network access is an intermediary good with respect to cellular operations, the result is that cellular expansion is occurring based on a faulty network cost assumptions so distorted by poor regulatory decisions that their entire business plan is flawed, at least as applied to rural BSP markets. "Rural cellular service is a good thing. But only in its proper place among other choices. *What is happening now is leading to a displacement of RLEC landline service with cellular service based on an unsustainable business model of RLEC subsidies.* This is going to catch up with the cellular companies eventually. Giving the cellular companies an additional USF subsidy to invest based on an inherently flawed business model is going to recreate the boom and bust of the UNE CLECs, and to the subscribers long term economic and service detriment." October 17, 2004 email from the author to Richelle Elberg, Director-Wireless Markets, JSI Capital Advisors [emphasis added].

imposition of incumbent benchmark rate caps, with the same resulting distortions in proper access rates.¹⁷⁶

94. Third, it is based on a faulty premise, namely that cellular traffic is local in nature when based on the purely artificial MTA standard applied by the Commission.¹⁷⁷

95. Fourth, it is premised on a finding that cellular does not compete with wireline¹⁷⁸ Once again the lack of a complete record resulted in a poor decision. The facts actually were that even as early as 1996, cellular had already made great inroads into the LEC long distance business, and was beginning to substitute for local service lines as well.¹⁷⁹ Even the Commission acknowledged that wireless then had the technical ability to compete.¹⁸⁰ And notwithstanding the impact of cellular at the time of the Local Competition Order, today it has become a viable competitor to BSPs, resulting in an erosion of rural carrier long distance and local service business.¹⁸¹ According to the MTA Report, “Currently wireless handsets comprise more than 50% of telephones used in the US. Up to 50% of 18-30 year old purchasers use their wireless service only and are entirely going away from traditional landline

¹⁷⁶ See Text at ¶ 29 and accompanying Notes, *supra*.

¹⁷⁷ As discussed above, this is the direct result of circular reasoning on the Commission’s part, essentially defining the market in a way prejudicial to small wireline BSPs and hugely in favor of large cellular operators. See Note 166, *supra*.

¹⁷⁸ “...the record in this proceeding contains no evidence that wireless local loops have begun to replace wireline loops for the provision of local exchange service. Thus, until such time that we decide otherwise, CMRS providers will not be classified as LECs, and are not subject to the obligations of section 251(b).” Local Competition Order at ¶1005. Unfortunately, both long distance revenue and local line substitution were in fact just starting to take off in 1996, and there was no need for the Commission to take such drastic actions favoring cellular providers, a textbook example of “regulatory lag,” albeit one which has had severe financial consequences for rural BSPs.

¹⁷⁹ Duesterberg & Gordon writing in 1998 observed: “With increasing frequency, new products, such as wireless telephone connections, are replacing older ones and offering enhanced services as in the case of wireless telephony, mobility, and improved data transmission.” Duesterberg & Gordon at p. 4. “We believe that the replacement of wireline phones with wireless is inevitable and has been happening for years.” Cusick & Choe at p. 8. For the facts concerning the status of this multi-billion dollar industry in 1996, see Note 158, *supra*.

¹⁸⁰ “In addition, although CMRS providers are not currently classified as LECs, the fact that most CMRS providers are capable, both technically and pursuant to the terms of their licenses, of providing fixed services, as LECs do, buttresses our conclusion that these CMRS providers offer services that are ‘comparable’ to telephone exchange service and supports the notion that these services may become a true economic substitute for wireline local exchange service in the future.” Local Competition Order at ¶ 1014.

¹⁸¹ For example, the Minnesota Telecom Alliance reported in February 2005 that “**Competitors for local telephone service**, including wireless, Voice over IP (VoIP), Internet messaging and CATV, are competing successfully for local telephone service, **and are causing rapid, significant and measurable reductions** in overall usage and reduced usage per telephone line for small telephone companies.” MTA Report at Executive Summary, p. 1 [emphasis original]. “Wireless providers offer a full range of voice and other competitive services. ...[They] continue to see significant growth in handsets sold and Minutes of Use (MOU). Wireless providers are displacing toll usage, which reduces access MOU for wireline carriers...[and]...are displacing the purchase of second lines from wireline carriers.” *Id.* at Competitive Analysis, p. 1.

telephone service. 6% of all households already have only cellular service.”¹⁸² Clearly cellular service is now acting as an active, if not equal, competitor even in the small community BSP markets.

96. And this competition is having a real impact on small telephone company revenues. “[S]mall telephone companies are losing market share quickly in both minutes of use¹⁸³ and lines in service.”¹⁸⁴ According to the MTA Report, after growing through 2000, long distance Minutes of Use (MOU) have declined by 8.5% through the end of 2003 and wireline MOU per

¹⁸² MTA Report at Competitive Analysis, p. 1. “At the end of 2004, there were more wireless subscribers than wireline in the U.S.—182 million versus 176 million access lines—while in 1999 wireless subs only totaled 30% of wireline.” Horan et. al. at p. 21. *See, also*, Cusick & Choe, at p.1: “By year-end 2004, the equivalent of 62% of the U.S. population owned a cell phone. Carriers started 2005 with the best first quarter ever, adding 6.6 million customers to end the quarter at 64% penetration.” “We expect penetration to exceed 68% by year-end 2005, and to surpass 80% by 2012.” *Id.* at p. 5. These predictions are borne out by the Commission’s recent local telephone competition study: “At the end of 2004, end-user customers obtained local telephone service by utilizing approximately 145.1 million incumbent local exchange carrier (ILEC) switched access lines, 32.9 million competitive local exchange carrier (CLEC) switched access lines [almost entirely ILEC lines resold under UNE], and 181.1 million mobile wireless telephone service subscriptions.” FCC News Release.

¹⁸³ MTA Report at Competitive Analysis, p. 3. “Wireless currently has 40% market share of total voice minutes of use, but this is set to cross over 50% by the end of 2005, a sizable jump from 10% in 1999.” Horan et. al. at p. 21. “Long distance minutes over wireless are rapidly increasing, as most wireless customers today subscribe to a price plan that includes large (or unlimited) off-peak buckets and long distance at no additional charge.” Cusick & Choe at p. 9. These pricing plans, of course, are made possible because local wireline network access is heavily subsidized by BSPs and other LECs, creating a circular twisting of market economics and biasing consumer choices through subsidized cellular retail rates. *See* Text at ¶ 61 and accompanying Notes. Here are the economic consequences of this regulatory distortion: “Wireless is now cheaper than wireline for many users—Wireless plans at \$0.03--\$0.08/minute are declining by 20% per year and are already priced at or below wireline per minute pricing...” Horan et. al. at p. 23. “Wireless rates per minute declined from \$0.20 in 1999 to \$0.06 currently, while gross margins have been fairly stable. Wireline’s effective rate per minute, on the other hand, has been steady at \$0.06 per minute, while margins have declined. As stated above, the cost per minute for wireline may be increasing due to volume declines.” Horan et. al. at p. 22. And what causes these volume declines? Subsidization of wireless network access rates, an intermediate service and cost component of wireless service, by the very carriers that wireless competes against, which allows the wireless carrier to reduce its rates and attract additional customers while the BSP is losing these same customers and is prevented from recouping its costs either through fair access rates or retail price adjustments. *See* Text at ¶ 61 and accompanying Notes.

¹⁸⁴ MTA Report at Competitive Analysis, p. 3. “...it is more common today to retain only one line for data and emergencies, and to get one or more wireless phones for the family members. The loss of these [second] lines ...has slowed to a trickle and we believe most are gone at this point.” Cusick & Choe at p. 9. This is certainly PrairieWave’s experience—it currently averages only 1.04 lines per subscriber. However, even this average is likely to continue to deteriorate as local line substitution will only increase in the near future: “The final stage in the wireline migration is the complete and total migration, where customers will give up their home phone completely and just use a wireless phone. ...people coming out of college don’t ever turn on a landline, and the number of people choosing to turn off an existing line is increasing... These lines have migrated to wireless and we think are indicative of the demographic shift to wireless that will only accelerate going forward.” Cusick & Choe at p. 10. “[W]ireless substitution continues to pressure access lines...” Rollins et. al. at p. 3. “...15 million wireline access lines have already been dropped in the U.S. in favor of wireless phones. We estimate that another 20 million wireline phones will be replaced with wireless over the next four years...” Horan et. al. at p. 22. Again, this is directly tied to customer choices based on artificially low cellular retail rates that are highly subsidized by the BSPs and other LECs. BSPs like PrairieWave are being forced to subsidize cellular rates by allowing those carriers to use their networks at unjust rates.

access line declined 10.5% while wireless terminating MOU grew by 1,222.5% during the same period.¹⁸⁵ This experience is very similar to what is occurring at PrairieWave.¹⁸⁶

97. The result of all of these problems is an access rate situation that unfairly discriminates in favor of wireless companies and against other wireline companies, including BSPs in their own markets.¹⁸⁷ This is a clear violation of the Act and the Commission's own nondiscrimination standards.¹⁸⁸ All of this could be solved by a return to the common sense local/long distance

¹⁸⁵ See MTA Report, Company Data & Analysis, p. 2.

¹⁸⁶ From February 2004 to February 2005, PrairieWave's long distance MOU per subscriber decreased by 9% while from March 2004 to March 2005, wireless terminating MOU increased by 426%. Moreover, PrairieWave also tracks the impact on its originating access minutes of use. From August 2004 to April 2005, wireless originating MOU had increased 77.6% while wireline originating MOU per subscriber decreased by 6.7%, indicating a shift towards the cellular carriers. This shift is hugely magnified as a shift in access revenues since PrairieWave's wireless access rate is \$0.005 per MOU due to the unequal bargaining power of the large cellular companies while its average wireline rate is \$0.021 per MOU, even under the unreasonably low benchmark interstate rate analyzed above. PrairieWave estimates that it lost about \$179,000 in long distance revenues and over \$500,000 in access revenues over the last 12 months alone due to cellular competition and the related access rate differences, holding aside the substantial additional access revenue lost because of the incumbent benchmark rate caps. Moreover, given the continuing trends in the wireless industry, and absent any changes in the regulatory environment, PrairieWave foresees that these losses will compound themselves at about the same dollar amount each year. That is, its retail long distance and network access revenue losses are expected to be about \$2.4 million over the next 12 months. To put this magnitude of loss in perspective, PrairieWave could extend its broadband network to from 2,000 to 3,000 additional rural homes *per year* if these rate distortions were eliminated. That is the equivalent of one entire small community per year! This is a huge economic distortion in PrairieWave's rural service area.

¹⁸⁷ "...[C]ellular companies used their ability to abuse the RLEC access system to subsidize low retail rates, thus further driving their penetration into RLEC territories and allowing them to capture more market share. Today, cellular service is now perceived as a substitute service (undercutting one the fundamental reason for the FCC's special exemptions). RLECs not only lose two revenue streams as subscribers switch to cellular (local service fees and LD), they are also forced into a reduction of access revenue for the identical calling minutes. The result is that the RLECs must shift these lost revenues over to higher local service fees that, in turn, drive more people to the subsidized lower priced cellular services. ...This is not fair competition. Nor is it encouraging efficient capital investment. To the contrary, it is discouraging RLEC investment and encouraging the cellular companies to ride out the subsidies by using RLEC facilities to fund their expansion and grab market share. With USF, they are now building towers in areas that would not otherwise be economical for them to do so (even with their artificially lower access rates), allowing them to further erode the RLEC subscriber base and undercut the RLEC's financial ability to operate their network. These results are exactly the opposite results from the FCC's original goals. This is all going to fall apart as the RLEC revenue base shrinks, and at a market disequilibrium due to the favoritism and resulting subsidies granted to the cellular companies. Customers will be left with outdated and unmaintained land line service at higher prices, which they will then abandon for lower priced cellular service that is not of the same quality as the lifeline service. As fewer and fewer landline customers remain, the cellular companies will be forced into "overbuilding" rural areas by adding more tower sites. And guess what will happen to the service price? With a dwindling free ride from the RLECs, the cellular prices will rise back up. So subscribers end up with a technically inferior service at higher prices. This is what happens when government favors a new technology." October 17, 2004 email from the author to Richelle Elberg, Director-Wireless Markets, JSI Capital Advisors.

¹⁸⁸ "...[P]rice differences based not on cost differences but on such considerations as competitive relationships, *the technology used by the requesting carrier, the nature of the service the requesting carrier provides*, or other factors not reflecting costs, the requirements of the Act, or applicable rules, would be discriminatory and not permissible under the new standard. Such examples include the imposition of different rates, terms and

calling distinctions so carefully crafted by the states over the years along with company specific cost standards for all service providers that use a BSP's network.¹⁸⁹

98. The Commission acted wisely in rejecting voluntary agreements as a fair mechanism for setting network access rates, and its failure to do so in the specific context of wireless carriers was simply wrong, with correspondingly severe consequences on BSP network revenues. Ubiquitous network sharing must be mandatory to promote competition. Voluntary negotiated agreements cannot lead to the desired result due to unequal bargaining power whether based on market power or regulatory artifice,¹⁹⁰ a result that clearly occurred in the cellular area in BSP markets.

Bill-and-Keep Would Further Distort BSP Markets and BSP Access Rates

99. The concept of "Bill-and-Keep" interconnection arrangements was considered by the Commission in detail in the Local Compensation Order. It is by no mere circumstance that it immediately follows the discussion of reciprocal compensation,¹⁹¹ for Bill-and-Keep is merely reciprocal compensation pushed to its logical conclusion—no payments between the parties at all. Bill-and-Keep arrangements are "...those in which neither of the two interconnecting networks charges the other network for terminating traffic that originated on the other network. Instead, each network recovers from its own end users that cost of both originating traffic delivered to the other network and terminating traffic received from the other network."¹⁹²

100. The basic justification for Bill-and-Keep is administrative convenience and regulatory simplification.¹⁹³ Other alleged justifications include economic efficiency and technological neutrality.¹⁹⁴ However, once again these alleged benefits, while perhaps arguably occurring in

conditions based on the fact that the competing provider does or does not compete with the incumbent LEC, *or offers service over wireless rather than wireline facilities. We find that it would be unlawfully discriminatory, in violation of sections 251 and 252, if an incumbent LEC were to charge one class of interconnecting carriers, such as CMRS providers, higher rates for interconnection than it charges other carriers, unless the different rates could be justified by differences in the costs incurred by the incumbent LEC.*" Local Competition Order at ¶ 861 [emphasis added]. One wonders whether the Local Competition Order was even checked for internal consistency.

¹⁸⁹ It is significant that the Commission's decisions in this area were once again based on an incomplete factual record: "...the record contains no estimates of the cost of CMRS terminations." Local Competition Order at ¶ 1117. Bad facts make bad law, and no facts whatsoever yield truly disastrous results.

¹⁹⁰ Economists also agree that bargaining, while a form of market operations, is often unsuccessful due to transaction costs (especially with large numbers of parties), uniformity and fairness issues (especially where network economies are involved), and asymmetrical information costs. Breyer at p. 24.

¹⁹¹ See Local Compensation Order beginning at ¶ 1096.

¹⁹² *Id.*

¹⁹³ Local Compensation Order at ¶ 1101. Once again, administrative simplicity should not be used as a convenient justification for the many economic distortions and harmful competitive impacts caused by the desire to minimize regulation. See Text beginning at ¶ 51 and accompanying Notes.

¹⁹⁴ *Id.*

major metropolitan areas, simply do not and can not occur in rural BSP markets. To the contrary, Bill-and-Keep in the rural BSP markets would only exasperate the market distortion problems already described above for the following reasons:

101. First, to be fair and workable, Bill-and-Keep presumes that (1) traffic flow is roughly equal between the carriers and (2) that network costs are roughly equivalent.¹⁹⁵ We have already discussed the numerous reasons why network costs are not similar, or even close to similar.¹⁹⁶ There are also massive imbalances in traffic patterns, a result that should come as no surprise given the small size of BSPs compared to the giant RBOCs, IXC's, cellular companies and other nationwide carriers.¹⁹⁷ Imposing Bill-and-Keep would only further the massive economic distortions that already occur in BSP markets.¹⁹⁸

102. Second, because Bill-and-Keep completely ignores company specific network operating costs, it results in an uncompensated taking under the Fifth Amendment.¹⁹⁹ Bill-and-Keep is simply unconstitutional, especially as applied to rural BSPs.

Part IV: Company Specific Costs as the Economic Foundation for Fair BSP Access Rates

103. If incumbent benchmark rates, special exemptions, and reciprocal compensation arrangements (including Bill-and-Keep) produce such disparate results in BSP markets, what mechanism for establishing rural BSP access rates will provide just compensation to the BSP and meet the Commission's regulatory goals? The Commission already knows the answer. In 1996, it undertook an extensive comment period and study of the best mechanisms for setting rates.²⁰⁰ The Commission correctly noted that the costs and related pricing for interconnection, network access and universal service funding levels are all interrelated and should be based on a common unifying economic theory.²⁰¹ Following this study of local exchange company costs and the underlying economic fundamentals, *the Commission concluded that the forward looking economic cost model is the best mechanism to use in determining interconnection and network access costs.*²⁰² Unfortunately, it then proceeded to lose its way amid the politically infighting among the larger, well-established industry participants like the cellular companies

¹⁹⁵ *Id.* at ¶ 1103.

¹⁹⁶ *See* Note 175, *supra*.

¹⁹⁷ Even the new VoIP carriers are growing rapidly. Vonage recently announced that it is reaching the *one million* subscriber mark. Compare that to PrairieWave's current 60,000 subscriber base and you can easily see the mismatch in rural BSP bargaining positions even compared to relatively new technology startups.

¹⁹⁸ *See* Text and accompanying Notes beginning at ¶ 53.

¹⁹⁹ *See* Local Competition Order at ¶ 1105.

²⁰⁰ *See for example* the Local Competition Order, Part VII, beginning at ¶ 618.

²⁰¹ *Id.* at ¶¶ 716 and 718; CLEC Access Order I, ¶ 28.

²⁰² A theoretical conclusion supported by most economists. *See* Breyer at p. 38.

and the IXCs. Today it is facing a similar cacophony in the ongoing intercarrier compensation docket. Amid all of this noise, the Commission should not lose sight of the peculiar network cost imbalances faced by rural BSPs or it will literally kill off the very rural broadband network expansion that it originally encouraged in 1996 and now seeks as one of its primary goals. Its time for the Commission to return to the fundamentals: forward looking economic cost studies as a basis for rural BSP network access rates.

Forward-Looking Costs Remove Market Distortions and Provide Just Compensation

104. In its Local Competition Order, the Commission stated:

“In the following sections, we first set forth generally, based on the current record, a cost-based pricing methodology based on forward-looking economic costs, which we conclude is the approach for setting prices that best furthers the goals of the 1996 Act. *In dynamic competitive markets, firms take action based not on embedded costs, but on the relationship between market-determined prices and forward-looking economic costs. If market prices exceed forward-looking economic costs, new competitors will enter the markets. If their forward-looking economic costs exceed market prices, new competitors will not enter the market and existing competitors may decide to leave. Prices ... must be based on cost under the law, and that should be read as requiring that prices be based on forward-looking economic costs.* New entrants should make their decisions whether to purchase unbundled elements or to build their own facilities based on the relative economic costs of these options. By contrast, because the cost of building an element is based on forward-looking economic costs, a new entrant’s investment decisions would be distorted if the price of unbundled elements were based on embedded costs. In arbitrations of interconnection arrangements, or in rulemakings the results of which will be applied in arbitrations, states must set prices for interconnection and unbundled network elements based on the forward-looking, long-run, incremental cost methodology...”²⁰³ [Emphasis added.] “...[E]conomists generally agree that prices based on forward-looking long-run incremental costs (LRIC) give appropriate signals to producers and consumers and ensure efficient entry and utilization of the telecommunications infrastructure.”²⁰⁴

105. In reviewing the comments of parties to its Notice of Proposed Rulemaking in the Local Competition Order,²⁰⁵ the Commission further noted:

“Most new entrants and IXCs agree that prices for interconnection and unbundled elements should be based on forward-looking, economic costs.

²⁰³ Local Competition Order, ¶ 620.

²⁰⁴ *Id.* at ¶ 630.

²⁰⁵ NPRM 96-182.

Many state commissions also argue that, if federal pricing rules are adopted, forward-looking methodologies should serve as the basis for establishing rates in a competitive environment. ...Parties favoring a forward-looking, incremental cost methodology argue that it is the appropriate pricing standard for several reasons. First, such an approach stimulates the prices for network elements that would result if there were a competitive market for the provision of such elements to other carriers. In such a market, these parties argue, competition would drive prices to forward-looking costs, even if such costs were lower than a firm's historical costs. Second, unbundled element prices based on forward-looking economic costs prevent incumbent LECs from exploiting their market power at the expense of their competitors that are dependent on the incumbent LECs facilities. Third, forward-looking incremental cost methodology creates the right investment incentives for competitive facilities-based entry and creates incentives for the market to move towards competition while preserving opportunities for competition even if some network elements prove to be resistant to competition. Fourth, a pricing methodology based on forward-looking economic costs minimizes the incumbent LECs' opportunities to engage in anticompetitive cross-subsidization that could delay the emergence of effective competition. Finally, these parties argue that pricing based on forward-looking economic costs will lead to lower prices for consumers."²⁰⁶

106. The Commission subsequently accepted these arguments, and adopted the forward-looking economic cost approach as the best model for encouraging effective and efficient competition.²⁰⁷ It should also be noted that two of the states in which PrairieWave operates, Minnesota and Iowa, have adopted the forward looking economic cost model as the appropriate mechanism for setting BSP intrastate network access rates. South Dakota has stayed with the embedded historic cost approach, for the same practical reasons adopted by the Commission in its ILEC Access Order (that is, that the difference between existing embedded cost regulation and forward-looking economic costs is not material enough to force a change at this time).²⁰⁸

107. It should be recognized that there are some potential practical problems with establishing forward looking economic costs and the degree to which the Commission may appropriately exercise its rate setting authority via the states.²⁰⁹ Nevertheless *the general reasoning and*

²⁰⁶ Local Competition Order, ¶ 635.

²⁰⁷ *Id.* at ¶ 679.

²⁰⁸ ILEC Access Order, ¶ 131. This is also illustrated by the very small variance between PrairieWave's proposed tariff rates based on its forward-looking economic costs and the NECA interstate rates and pool compensation based on historical costs. See Note 32 *supra* and the PrairieWave Petition at ¶ 6: "It is also significant that whether viewed from the NECA cost methodology or a FLEC methodology, the cost of providing access services in the rural areas served by PrairieWave is approximately the same."

²⁰⁹ See *Verizon v. FCC*, 535 U.S. 467, 122 S. Ct. 1646, 152 L. Ed. 2d 701 (2002). The *Verizon* case is only the latest in a string of court decisions that question the application of the forward looking cost models in specific fact circumstances. See Breyer at pp. 39-40. Economists have also recognized the problems of determining forward

*economic conclusions reached by the Commission are compelling and support the use of company specific forward-looking economic costs for establishing interconnection and network access rates that are fair, just and reasonable.*²¹⁰ It should also be emphasized that while much of the Commission's analysis focuses on charges in excess of forward looking economic costs, *unfair competition and distortions in capital investment decisions also occur in situations where costs are arbitrarily set below long run forward-looking economic costs*, a concept that the Commission recognized as part of its analysis²¹¹ and that is now causing very real problems for PrairieWave as it plans its future development and investment activities in a situation where network access revenues are so far below rates based on its actual forward-looking economic costs.²¹²

BSP Company Specific Forward-Looking Cost Studies are Feasible and Inexpensive

108. We have already noted the success in using cost models in the small community ILEC access area.²¹³ We have also discussed and rejected the idea that forward-looking cost studies are too burdensome or administratively complex.²¹⁴ The truth is that forward-looking cost studies can be effectively employed by BSPs, even small rural BSPs. *The assumption that preparing forward looking cost studies is too burdensome, complicated and costly is simply untrue* and is being used as an excuse by many smaller CLECs on the mistaken belief that such studies would disadvantage them. This is arguing from ignorance, as very few CLECs have ever used the Part 32 accounting system or studied the relative advantages of doing so. If they did, they would recognize that Part 32 has built into it regulatory relief in the form of what is known as "Class B" compliance status, which eliminates the need for systems as complicated

looking costs as opposed to historical embedded costs. See Posner at p. 98 and Breyer at p. 38. However, these problems have mostly surfaced in highly technical areas such as UNE element costing. PrairieWave did not find its forward-looking economic cost study to be overly burdensome or difficult for its BSP markets.

²¹⁰ "...[The] payment of rates based on [long run incremental costs] plus a reasonable allocation of common costs, pursuant to section 251(d)(1), represents full compensation to the incumbent LEC for use of the network elements that telecommunications carriers purchase." Local Competition Order at ¶ 721. "...[A] forward-looking economic cost methodology satisfies the Constitution's just compensation standard." *Id.* at ¶ 740. "Historically, ILEC access charges have been the product of an extensive regulatory process by which an incumbent's costs are subject to detailed accounting requirements, divided into regulated and non-regulated portions, and separated between the interstate and intrastate jurisdictions. Once the regulated, interstate portion of an ILEC's costs is identified, our access charge rules specify in detail the rate structure under which an incumbent may recover those costs. *This process has yielded presumptively just and reasonable access rates for ILECs.*" CLEC Access Order I, ¶ 41 [emphasis added].

²¹¹ Local Competition Order, ¶ 620.

²¹² See the analysis of market distortion problems, beginning in ¶53, *supra*.

²¹³ See Text beginning at ¶ 78, *supra*.

²¹⁴ See Text at ¶¶ 42-43 and 50-52, *supra*.

as those imposed on the RBOCs and other large ILECs yet still provides the necessary data for access rate cost studies.²¹⁵

109. Part 32 is essentially a specialized cost accounting system tailored to telecommunications services. Its primary usefulness is the allocation of common costs (primarily labor costs) to specific activities unique to telecom as opposed to conventional expense accounts. As such, it really represents a form of activity based costing, a method of cost accounting that is now being widely deployed across numerous industries. Activity based costing is widely recognized as extremely effective for management information and decision making purposes.²¹⁶ In fact, it is so useful that PrairieWave employs it not only for its ILEC and CLEC telephone operations, but for all of its unregulated unit operations as well (cable television, Internet access services, data services, construction and field repair services, etc.). It could fairly be said that the failure by CLECs to use the regulatory accounting process of Part 32 in order to allow the preparation of accurate cost studies is simple management negligence, especially in the BSP industry.²¹⁷

110. The complications arise not from Part 32 cost accounting, but from the jurisdictional and other separation processes under Parts 36 and 69 necessary to complete an access rate cost study.²¹⁸ Fortunately there are a number of firms (both accounting and consulting firms) that are available at very reasonable cost to perform these studies.²¹⁹ In fact, these firms actively compete for small ILEC and BSP business, bringing real competitive market pricing to at least this part of the industry.

111. It is out of sheer accounting ignorance that no CLEC in the CLEC Access Order I proceedings suggested adopting the ILEC regulatory approach, with the result that the Commission was deprived of the very information that would have properly resolved the problem. In fact, the CLEC Access Orders are notable primarily for their complete lack of CLEC access cost study analysis, even though the Commission has heavily focused on the appropriateness of such studies in setting proper rates for similarly situated small ILECs.²²⁰

²¹⁵ 47 C.F.R. § 32.11. It is worth noting that substantial technical reference materials, seminars and training courses, and practical assistance are available to small BSPs through the National Exchange Carriers Association.

²¹⁶ See generally Horngren at pp. 115, 159, and 199; Hirsch at pp. 74-83; and Cooper & Kaplan at pp. 257, and 267-461. Cooper and Kaplan devote an entire chapter to the use of activity based cost systems in service organizations. *Id.* at Chapter 7, pp. 466-575.

²¹⁷ Actually, there might be cases where the use of Part 32 accounting is not possible, though these should be extremely rare. For this reason, the use of the Commission's waiver process might be the best way to address the issue, since it allows BSPs to voluntarily choose to use the appropriate Part 32 accounting rules, prepare the necessary cost studies, and present the data to the Commission to support a specific waiver. This is the legal theory underlying the PrairieWave Petition.

²¹⁸ See 47 C.F.R. Parts 36 and 69.

²¹⁹ See Note 77, *supra*.

²²⁰ Much, I am sure, to the immense frustration of the Commission and its staff. This situation had not improved by the time of the CLEC Access Order II. CLEC Access Order II, ¶¶ 35, 45. In fact, PrairieWave believes it is

Conclusion

112. It is useful to stop for a moment and summarize what is happening in BSP markets such as those served by PrairieWave. Essentially, the CLEC Access Orders (and the Local Competition Order in the case of cellular carriers) have ignored the very real cost differences between large incumbent service areas and smaller communities and used incumbent access rates as proxies for BSP rates, even though the incumbent rates are not set by competitive market interactions, especially in the smaller markets. With respect to cellular carrier access rates, the Commission has magnified this distortion by focusing on MTAs as “local service areas” instead of actual BSP markets. Both mistakes result in access rates that are far below company specific forward looking economic costs. BSPs are unable to recover the appropriately allocated costs from incumbents and other competitors using their networks. This has distorted the proper functioning of market cost/price signals, with the following results:

- BSPs like PrairieWave are subsidizing incumbents, large cellular carriers and other competitors (or are forcing their subscribers to provide the subsidies via higher local service rates and charges). As a result, competitor retail rates do not reflect the true costs of service and retail consumer choices are biased towards the subsidized companies and technologies.
- Capital investment decisions are being distorted, both by discouraging new competitive investment by BSPs and, conversely, by encouraging inefficient market decisions by incumbents, cellular carriers and other competitors who use the BSP networks to terminate calls or transmit data at unfairly low rates. This operates to delay the introduction of new advanced broadband technologies in BSP markets and subsidizes the introduction of immature technologies like VoIP or economically inefficient technologies like cellular.
- BSP financial viability is being threatened, as BSPs are unable to pass through unpaid network access revenues to other revenue sources and are forced to simply absorb the unpaid network costs. This constrains BSP access to capital and has virtually stopped the introduction of new broadband networks to additional small communities. It also results in a public taking of the BSP’s property without just compensation, which is unconstitutional on its face.
- The combined impact of these affects is destabilizing the markets to the long-term detriment of consumers.

113. None of this should be surprising. As noted above, the Commission recognized the serious threat of all of these ramifications when it designed its initial rules for the “Rural

the first CLEC, let alone BSP, to present a full forward-looking economic cost study to the Commission for its consideration. *See* the PrairieWave Petition at p. 8.

Exemption”.²²¹ However, as discussed in detail above, the “Rural Exemption” is not properly structured to remedy these problems, at least in PrairieWave’s situation.

114. All of these harmful results flowing from the Commission’s past access decisions can be remedied simply by returning to the Commission’s original economic analysis and setting network access rates on actual BSP forward looking costs based on the unique factors for their particular geographic market areas. This is precisely what is requested by the PrairieWave Petition.²²² It is also precisely what the Commission has ordered as the appropriate way for small rate of return ILECs to address disparities that result from the Commission’s ILEC Access Order:

“To avoid any undue hardship that may result from selecting a default allocator of 30 percent, rate-of-return carriers also will have the option to submit a cost study to establish the portion of their local switching costs attributable to line port costs. *Carriers electing this approach must base their cost studies on geographically-averaged costs, and submit the cost study in support of the tariff filing relying on the cost study.* Once a rate-of-return carrier has performed a cost study to support its tariff, it may rely on that cost study for subsequent tariff filings. A rate-of-return carrier electing to use a cost study for a tariff must use the cost study for all elements in the tariff.”²²³

115. Cognizant of the potential for unforeseen impacts in the access area, the Commission recognized the need for potential relief in the CLEC Access Order I: “We stress, however, that the mechanism set out below is a transitional one; it is not designed as a permanent solution to the issues surrounding CLEC access charges.”²²⁴ Commentators have also stressed the need to reevaluate regulation in light of actual results.²²⁵ Well, the truth is that in the rural BSP

²²¹ The Commission has also recognized in its analysis of rate of return ILECs that rural and nonrural ILECs have very different operating costs. ILEC Access Order, ¶ 27.

²²² See PrairieWave Petition at p. 15.

²²³ *Id.* at ¶ 95. Once again, the application of rate of return LEC analysis to BSPs like PrairieWave makes much more sense than the imposition of incumbent benchmark rate caps that bear little relationship to the BSP network cost structures. Note that actual costs are also the basis on which the Commission decided its rules for price cap LECs. “These rate structure modifications are similar to reforms previously implemented for price cap carriers, and will foster efficient pricing by permitting rate-of-return carriers to establish new, cost-causative rate elements.” *Id.* at ¶ 107 [emphasis added].

²²⁴ CLEC Access Order I, ¶¶ 7. See, also, *Id.* at ¶¶ 15, 63. In CLEC Access Order II, the Commission specifically recognized that its general incumbent rate caps might prove inappropriate in an BSP setting and exempted the petition of SouthEast Telephone, Inc. for a waiver of these rules from its final decision and resolution of other petitions for reconsideration and relief, pending further consideration under its waiver rules. CLEC Access Order II, fn. 117. Such relief was also considered appropriate by many of the large IXCs and other commenters. See *Id.* at fn. 131. A similar, if not more compelling case, is made by PrairieWave in the PrairieWave Petition. See Note 59, *supra*.

²²⁵ “...[I]t is one thing to change the rules of the game, it is quite another to ensure that the new rules will produce the desired results. Ultimately, the success of the pro-competitive regulation will be measured by the availability of enhanced services, the extent of investment in broadband facilities, and the degree of competition that emerges

markets today, current network access rules are wreaking economic havoc. It's time to reevaluate the impact of present regulation on rural BSP markets and return to company specific costing.

<<END>>

in local markets.” Wilson at p. 171. “Whether measured in terms of industry structure (the number and organization of firms competing to provide services) or in terms of firm behavior (competitive price setting, innovation, diversity, and quality of services) competition is now the standard for measuring success.” *Id.* at p. 279.

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